

Sampling

Samplers - Solid

Samplers, Single Use Disposable



Suitable for all industries (pharmaceutical, food, chemical, cosmetic, biotechnology, etc). Pre-sterilised versions available. Length 1000 or 500 mm, diameter 21 mm.

- Never have to be cleaned
- Cross-contamination risk is eliminated
- Assembled in a cleanroom environment
- Economical - save time and money

Packaging: Each sampler is individually bagged, 20/box.

Disposable PowderThief for sampling powders and granules

Description	Sterile	Pk	Cat. No.
HDPE, 500 mm, tip size 1 ml	-	20	300-2028
	+	20	300-2029
HDPE, 500 mm, tip size 5 ml	-	20	300-2030
	+	20	300-2031
HDPE, 500 mm, tip size 10 ml	-	20	300-2018
	+	20	300-2019
HDPE, 500 mm, tip size 20 ml	-	20	300-2020
	+	20	300-2021
HDPE, 1000 mm, tip size 1 ml	-	20	300-2022
	+	20	300-2023
HDPE, 1000 mm, tip size 5 ml	-	20	300-2024
	+	20	300-2025
HDPE, 1000 mm, tip size 10 ml	-	20	300-2016
	+	20	300-2017
HDPE, 1000 mm, tip size 20 ml	-	20	300-2026
	+	20	300-2027

Disposable LiquiThief for sampling low viscosity liquids (eg. water)

Description	for volume (ml)	Sterile	Pk	Cat. No.
HDPE, 500 mm	100	-	20	300-2002
		+	20	300-2003
PP, 500 mm	100	-	20	300-2005
		-	20	300-2000
HDPE, 1000 mm	190	+	20	300-2001
PP, 1000 mm	190	-	20	300-2004

Disposable ViscoThief for sampling creams and gels

Description	for volume (ml)	Sterile	Pk	Cat. No.
HDPE, 500 mm	100	-	20	300-2012
		+	20	300-2013
PP, 500 mm	100	-	20	300-2015
		-	20	300-2010
HDPE, 1000 mm	190	+	20	300-2011
PP, 1000 mm	190	-	20	300-2014

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Sampler, StickProof



Made of stainless steel. Sampler for powders in the pharmaceutical industry. The conical inlet of the tip lets you collect a variable sample size. StickProof is constructed in one piece without edges, grooves or crevices for perfect and easy cleaning. The sample can be filled directly into the sampling bag and fastened with a sturdy clamp.

StickProof: Length 410 mm, Ø 25 mm; boring Ø 20 mm, length of the chamber 120 mm, sampling bags: 170x120 mm.

- The especially slender tip can be inserted easily and deeply
- Surface electropolished
- Variable sample size of up to 50 ml

Delivery Information: Complete with clamp and 100 sampling bags PE

Description	Pk	Cat. No.
StickProof	1	312-1176

Sampler, SiloPicker



Made of stainless steel the SiloPicker takes samples of bulk goods. The insert depth depends on the density of the bulk goods. Standard length is 1 m. Inserting the SiloPicker into the bulk goods automatically closes the collection container. When the sampling depth has been reached, the sampling container is filled, and the SiloPicker can be withdrawn.

- Easy handling
- With the extension rod it is possible to take samples of bulk goods at a depth of up to 3.5 m

Description	Pk	Cat. No.
SiloPicker	1	300-1025

Accessories

Description	Pk	Cat. No.
Extension rod 50 cm	1	300-1026
Extension rod 100 cm	1	300-1037

Zone Samplers



For sampling bulk goods of all types. The big advantage of the zone sampler is that cross-sectional samples can be collected from all layers of a container. Using the zone sampler, very different kinds of bulk goods can be collected, from the finest powder up to coarse grains, such as corn or nuts. The zone samplers are available in 3 lengths:

- 55 cm for sacks;
- 85 cm for barrels, drums and mixing containers;
- and 150 cm for bags, silos and tanks.

Special lengths are available on request.

Three types of zone samplers are available:

- Multi-sampler with several closed chambers for multi-target samples from several different sample depths
- Uno-sampler with one closed chamber for a targeted sample from a specific sample depth
- All-layer sampler and Jumbo sampler with open inner tube, no chambers, for cross-sectional samples throughout all layers of sampling material. Emptying is simple via the open end of the sampler tube. The Jumbo sampler with a 50 mm tube diameter is ideal for larger grain sizes and quantities

All samplers have the smallest possible gap between inner and outer tube.

- Easy to clean, removable tip
- Colour coding (Multi- and Uno-samplers)
- Ultrapure materials: stainless steel/PTFE
- 3 lengths from 55 mm to 150 cm
- Excellent finishing, robust construction

Sampling

Samplers - Solid

Description	Length (mm)	Imm. depth (mm)	Chambers	Volume (ml)	Ø (mm)	Pk	Cat. No.
Multi-sampler, aluminium	55	430	3	14	25	1	312-1111
	85	710	3	17	25	1	312-1112
	150	1355	5	17	25	1	312-1113
Multi-sampler, stainless steel/PTFE	55	430	3	14	25	1	312-1101
	55	430	1	17	25	1	312-1131
Uno-sampler, stainless steel/PTFE	85	710	1	17	25	1	312-1132
All-layer sampler, aluminium	55	430	3	70	25	1	312-1183
	85	710	3	130	25	1	312-1185
	150	1355	5	260	25	1	312-1184
Jumbo-sampler, aluminium	850	710	3	880	50	1	312-1121
	1500	1355	5	1700	50	1	312-1122

Accessories

Description	Pk	Cat. No.
Case for transport	1	312-1141
Tube cleaning brush 25 mm Ø, 1 m	1	331-2170

Ice Borer



Stainless steel. Ideal both for deep-frozen products in the food industry and semi-solid substances. The sharp sawing crown of the very robust hollow borer rapidly cuts into the sample. A cylindrical sample (cross-sectional sample) with a diameter of 18 mm and a length of up to 20 cm can be cut out. Consists of three parts: borer, borer head for use in conventional drills and rod for pressing the cylindrical sample out of the borer head. Diameter ext. 21 mm, diameter int. 18 mm.

- Can be sterilised
- Very sharp
- Complete with case



Description	Pk	Cat. No.
Ice borer complete	1	312-0072

Ice Sampler



Developed for sampling from frozen materials and similar substances. The Ice Sampler screws into the sample material and simultaneously extracts and conveys the sample into the sampling cylinder. The Sampling cylinder is detachable. The Ice Sampler is electropolished and does not have any flutes for perfect and easy cleaning.

- Sterilisable
- Electropolished
- Simple cleaning



Description	Pk	Cat. No.
Ice Sampler complete, 300 mm	1	300-1047
Ice Sampler complete, 550 mm	1	300-1048
Ice Sampler complete, 1050 mm	1	300-1049

Accessories

Description	Pk	Cat. No.
Transport case 300 mm	1	300-1050
Transport case 500-1050 mm	1	312-0071

Control Seal, close-it®



312-1151



312-1156

In contrast to normal labels, 'close-it' adheres well to sacks that are coated with powder (plaster, flour etc.) 'close-it' is a self-adhesive seal with aluminium backing, which adheres very firmly. Sacks, cartons, etc. which have been pierced and sampled by Powder-Proof (or other samplers) can be hermetically re-sealed. The sampling date, the name of the quality supervisor and other information can be written on the seal with pen, pencil or felt-tip pen. 1 roll contains 500 stickers.

- Adheres very firmly
- Can be written on
- Size: 95x95 mm

Description	Pk	Cat. No.	
Printed red	1 Roll	312-1151	•
Printed green	1 Roll	312-1152	•
Printed yellow	1 Roll	312-1153	•
Printed black	1 Roll	312-1154	•
Unprinted white	1 Roll	312-1155	•

Accessories

Description	Pk	Cat. No.	
Dispenser 95x95 mm	1	312-1156	

Sterile Sample Bottles for Water Testing



HDPE

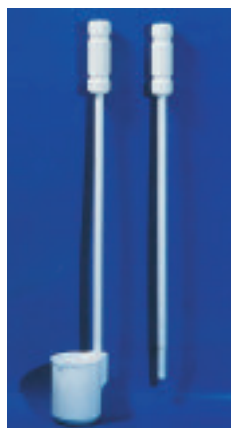
The flasks are dosed with sodium thiosulphate, which inhibits the effects of chlorine, bromine and ozone present in the water when the sample is taken. Square bottles for more efficient storage (apart from 250 ml bottles - rectangular). Shelf life: 2 years

- Dosage in compliance with standards: - 20 mg/l French standard NFT90-400, 100 mg/l ISO 5667-3
- Sodium thiosulphate in powder form
- Tamper evident closure which guarantees the sterility of the bottles prior to use



Capacity (ml)	with	Cap	Packed	Pk	Cat. No.	
250	5 mg Na ₂ S ₂ O ₃	Sealed screw cap	Bulk	312	331-3407	•
	5 mg Na ₂ S ₂ O ₃	Sealed screw cap	Individually	200	331-3408	•
500	10 mg Na ₂ S ₂ O ₃	Sealed screw cap	Bulk	100	331-3411	•
	10 mg Na ₂ S ₂ O ₃	Sealed screw cap	Individually	100	331-3412	•
1000	20 mg Na ₂ S ₂ O ₃	Sealed screw cap	Bulk	84	331-3417	•
	20 mg Na ₂ S ₂ O ₃	Sealed screw cap	Individually	84	331-3402	•
500	10 mg Na ₂ S ₂ O ₃	Hinged cap	Bulk	100	331-3403	•
	10 mg Na ₂ S ₂ O ₃	Hinged cap	Individually	100	331-3405	•

Sample Dippers



PTFE, inert

Extendible screw-in shafts have a steel core for rigidity and are fully encapsulated in PTFE. The basic unit consists of a container with a single 600 mm shaft. A second shaft (331-0005) can be screwed onto the handle for more length.

- Very good chemical resistance
- Temperature resistant; suitable for use at high and low temperatures (-200 to +280 °C)

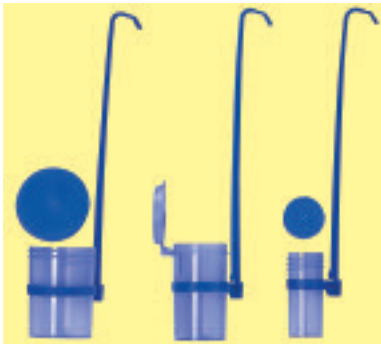
Description	Capacity (ml)	Pk	Cat. No.	
Dipper, Ø 54 mm	100	1	331-0006	•
Dipper, Ø 66 mm	250	1	331-0007	•
Dipper, Ø 80 mm	500	1	331-0008	•
Dipper, Ø 100 mm	1000	1	331-0009	•
Replacement/extension shaft	-	1	331-0005	•



Sampling

Samplers - Fluid

Sample Dippers



All sample dippers are made of blue polypropylene and consist of a bottle with snap handle. Available with either hinged or screw cap.

- Containers designed for sample collection and dispatch for testing in the same container, eliminating cross contamination risks
- Gamma-sterilised and individually packed in sealed zip bag to guarantee integrity of sample

Description	Capacity (ml)	Pk	Cat. No.	
Screw cap	40	250	331-3414	•
	125	100	331-3416	•
	180	100	331-3415	•
Hinged cap	90	150	331-3413	•

Chemistry Scoop



For aggressive liquids, with fixed rod, parts coming into contact with sample-media made of PP.

- Three sizes
- Rod length 100 cm
- Without metal

Description	Capacity (ml)	Pk	Cat. No.	
Chemistry Scoop	250	1	331-2110	•
	500	1	331-2111	•
	1000	1	331-2112	•

TeleScoop



Ideal for sampling from pools, tanks, manholes, surface water. Suitable for deep and narrow shafts. The telescopic rod is aluminium and can be equipped with 4 different snap-on scoops for various applications. The angle between the telescopic rod and beaker can be adjusted through 90°. Pendulum beaker, 1000 ml. Irrespective of the rod angle, the beaker always assumes a vertical position. Bottle holder for all bottles up to 95 mm dia.

- Telescopic rods are fully adjustable
- Pendulum beaker allows for none of the contents to be lost



331-2130



331-2120



331-2145

Description	Pk	Cat. No.	
Telescopic rod, 0.6-1.2 m	1	300-0037	•
Telescopic rod, 1-3 m	1	300-0039	•
Telescopic rod, 1.5-4.5 m	1	331-2143	•
Angular beaker, 500 ml	1	331-2130	•
Angular beaker, 1000 ml	1	331-2131	•
Angular beaker, 2000 ml	1	331-2132	•
Pendulum beaker, 500 ml	1	331-2120	•
Pendulum beaker, 1000 ml	1	331-2121	•
Pendulum beaker, 2000 ml	1	331-2122	•
Bottle holder	1	331-2145	•

Sampler for Liquids, LiquiSampler



Made of ultra-pure and chemically inert PTFE/FEP for contamination-free sampling. Sampling from open and closed barrels, vats, tanks, silos, open waters (ponds, streams, lakes, rivers). Fits all commercially available vats and barrels with openings of at least 25 mm diameter. Easy to clean as all surfaces are free of pores and crevices, preventing accumulation of dirt. Colour coded push-buttons in red, blue, green, yellow, white and black. 250 ml containers.

- Disassembly and cleaning is extremely simple
- Easy-to-use one-hand push-button operation
- Transparent
- Suitable for point sampling, cross-sectional sampling, bottom sampling

According to DIN 53 242

Description	Pk	Cat. No.
LiquiSampler, PTFE/FEP, 1 m	1	331-2150
LiquiSampler, PP, 1 m	1	331-2152

Accessories

Description	Pk	Cat. No.
Tube cleaning brush 25 mm Ø, 1 m	1	331-2170

Sampler, MiniSampler



The single-use, flexible, suction hose can be quickly replaced, thus ensuring that the samples are never contaminated. If necessary, a new hose can be used for every single sample. Due to its small diameter (8 mm) and flexibility the hose can reach sampling areas which are otherwise inaccessible.

- Can be used with oils
- Various accessory bottle sizes available

Delivery Information: Supplied complete with 10 bottles PE 100 ml in a stable case.

Description	Pk	Cat. No.
MiniSampler PE complete	1	300-1021

Accessories

Description	Pk	Cat. No.
Suction hose, PE, Ø 6 mm, wall thickness 1 mm	100 m	300-1045

Sampler, ViscoSampler



Made of transparent PP or ultra-pure and chemically inert PTFE/FEP for contamination-free sampling. The media is drawn up and discharged using the suction flask. Specially developed for viscous substances, for example, slurries, silt, wet clay and soil samples, soil sediments, oils, emulsions, creams etc. Colour coded handles are available in red, blue, green, yellow, white and black, avoid confusion. Easy cleaning: All surfaces are poreless and without crevices. Only round threads tried and tested in food hygiene are employed.

- Powerful suction for viscous media
- No dirt accumulation
- Dissembling and cleaning is very easy

Description	Pk	Cat. No.
ViscoSampler, PTFE/FEP, 1 m	1	331-2160
ViscoSampler, PP, 1 m	1	331-2162

Accessories

Description	Pk	Cat. No.
Tube cleaning brush 25 mm Ø, 1 m	1	331-2170
Extension rod	1	331-2171

Sampling

Samplers - Fluid

Sampler with Hose and Hose Weight, Stainless Steel, UniSampler



The heavy stainless-steel tube brings the hose to any desired depth. The suction hose is made of PVC and 2.50 m long. Operation: lower the suction hose into the medium, attach the sampling bottle to the adapter, create a vacuum using the handpump and collect the sample, remove the filled sampling bottle, close and label.

- Sampler for deep, narrow and hard-to-reach spots
- The samples are collected using a handoperated vacuum pump and transferred directly into the sampling bottle to ensure sampling purity
- Easy handling

Delivery Information: Supplied complete in case with sample bottle, hose, handpump and 20 labels.

Description	Pk	Cat. No.
UniSampler with tube	1	300-1042

Accessories

Description	Pk	Cat. No.
Sample bottle 1000 ml	1	300-1018
Spare PVC hose, 2.50 m long	1	300-1043

Dipping Bottle Ex



Made of spark suppressing metals (brass, lead). Bottle is 80 mm Ø, 350 mm high. Without lowering cable.



- For sampling flammable liquids
- Easy handling

Acc. DIN 51 750

Description	Pk	Cat. No.
Dipping bottle Ex	1	300-1035

Accessories

Description	Pk	Cat. No.
Lowering cable, stainless steel, conductive, Ø 2.3 mm, length 10 m	10 m	300-1040

Dipping Vessel



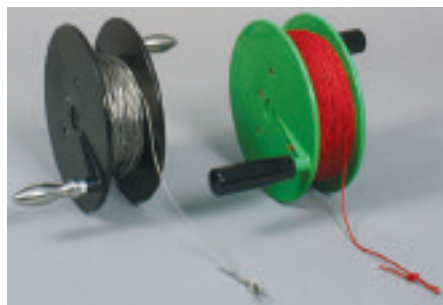
Made of chrome-plated brass or stainless steel. 1 l capacity, 75 mm Ø, 380 mm high. Lowering cable must be ordered separately.

- For withdrawing liquids from tanks, tanker lorries, etc.
- Easy handling

Acc. DIN 51 750

Description	Pk	Cat. No.
Dipping vessel, chrome plated brass	1	300-1033
Dipping vessel, stainless steel	1	300-1034

Manually Operated Reel, Conductive



PA

Specially designed for use with flammable liquids of hazard class AIII (VbF). Should only be used in combination with an electrically conductive lowering cable or chain-type cable. Please order your required lowering cable separately.
Reel diameter 100 mm, total diameter 180 mm.

- High winding capacity
- Width 50 mm

Description	Pk	Cat. No.
Manually operated reel "Ex" without cable	1	300-0015

Bottles, Water Sampling, Narrow Mouth with Screw Cap

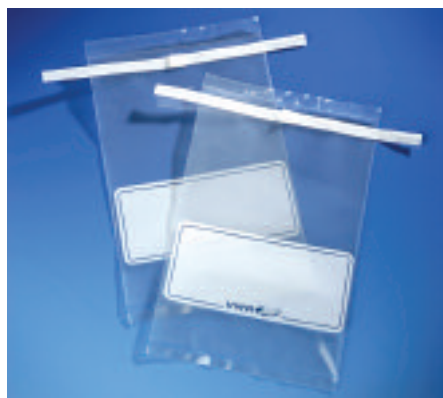
HDPE, translucent with red screw cap

Space saving square bottles.

- Capped ionised (10 KGray)
- Excellent shock resistant
- Excellent tightness

Capacity (ml)	Neck I-Ø (mm)	WxDxH (mm)	Colour	with	Pk	Cat. No.
1000	28	82x82x182	natural	Assembled tamper-evident screw cap with shaped seal	84	215-2288

Twist-Seal Bags



LDPE bags, manufactured and packaged in sterile conditions

Universal use for samples such as foods, liquids, grains, petroleum products, animal material, waste and soil samples.

- Wire tab keeps bag open for filling
- Unique fold over system providing a temporary leak-proof seal



Double regular wire, without write-on panel

Capacity (ml)	Dimensions (mm)	Pk	Cat. No.
60	76x127	500	129-9831
120	76x178	500	129-9832
450	114x190	500	129-9833
540	114x229	500	129-9834
720	140x229	500	129-9837
810	114x305	500	129-9835
1080	114x382	500	129-9836
1260	140x382	500	129-9838
1650	178x305	250	129-9839

Double regular wire, with write-on panel

Capacity (ml)	Dimensions (mm)	Pk	Cat. No.
60	76x127	500	129-9842
120	76x178	500	129-9843
540	114x229	500	129-9844
720	140x229	500	129-9846
810	114x305	500	129-9845
1650	178x305	250	129-9847

Sampling

Bags and Swabs

Flat regular wire, without write-on panel

Capacity (ml)	Dimensions (mm)	Pk	Cat. No.	
120	76x178	500	129-9850	•
540	114x229	500	129-9851	•
810	114x305	500	129-9852	•
720	140x229	500	129-9854	•
1080	114x382	500	129-9853	•
1260	140x382	500	129-9855	•
1650	178x305	250	129-9856	•
1800	254x305	250	129-0012	•
3000	254x382	250	129-0013	•

Flat regular wire, with write-on panel

Capacity (ml)	Dimensions (mm)	Pk	Cat. No.	
120	76x178	500	129-9859	•
540	114x229	500	129-9860	•
720	140x229	500	129-9862	•
810	114x305	500	129-9861	•
1650	178x305	250	129-9863	•
1800	254x305	250	129-0010	•
3000	254x382	250	129-0011	•

Pressure Seal Bags



Resealable pressure seal bag for storing and protecting food and all kinds of small parts and spare parts.

- Can be resealed repeatedly, flexible and tear-proof
- Suitable for use with food
- Transparent material means contents are clearly visible
- Simple sealing with guide tracks on the pressure seal

Description	Pk	Cat. No.	
LDPE, 80x120 mm	100	129-9142	•
LDPE, 100x150 mm	100	129-9143	•
LDPE, 120x170 mm	100	129-9144	•
LDPE, 160x220 mm	100	129-9145	•
LDPE, 180x250 mm	100	129-9146	•
LDPE, 300x400 mm	100	129-9147	•
PE, 200x300 mm	100	129-9136	•
PE, 250x350 mm	100	129-9137	•
HDPE, 220x310 mm	100	129-9154	•

Sample Bags

Nalgene



LDPE

Ideal for small lab items, botanical samples and other specimens. Not recommended for storing liquids.

- Strong, transparent and waterproof
- Heavy-duty zipper seals contents

Thickness: 0.1 mm

Description	Pk	Cat. No.	
102x152 mm	50	216-8121	•
127x203 mm	50	216-8122	•
152x330 mm	50	216-8123	•
229x330 mm	50	216-8124	•
229x457 mm	50	216-8125	•

Sample Bags, Minigrip with "Kangaroo-pocket"



- Additional pocket (170 mm) for documents

Thickness: 50 µm

Description	Pk	Cat. No.	
Bags, 160x220 mm	1000	129-2014	•

Bags



PE

Self-seal with white panels, 200 gauge.

Description	Pk	Cat. No.	
Bag, 57x57 mm	1000	129-0916	•
Bag, 89x114 mm	1000	129-0917	•
Bag, 102x140 mm	1000	129-0918	•
Bag, 152x229 mm	1000	129-0919	•

Specimen Bags, Mini-grip, Biohazard



PE

Specimen bags with front compartment for specimen (150x140 mm) and back pocket for report.

- Thumb and fingers press seal across upper section
- Plain for own labelling or printed with biohazard symbol

WxH (mm)	Pk	Cat. No.	
150x140	500	129-0412	
150x140	500	129-0342	•

Storage Bags

Clear PE, plain

Heavy duty storage bags, 500 gauge. Suitable for heat sealing.

WxH (mm)	Pk	Cat. No.	
150x200	100	300-0045	
255x355	50	300-0046	•
355x510	50	300-0047	•
455x760	50	300-0048	•

VWR Critical Swab®, Foam-over-cotton Head Swabs



149-0335



149-0336

Disposable foam-over-cotton tip swab features 100% polyurethane foam with 100 ppi and a wooden shaft.

- Combine the benefits of foam and cotton head swabs
- Foam exterior resists abrasion and most solvents
- Cotton core is highly absorbent

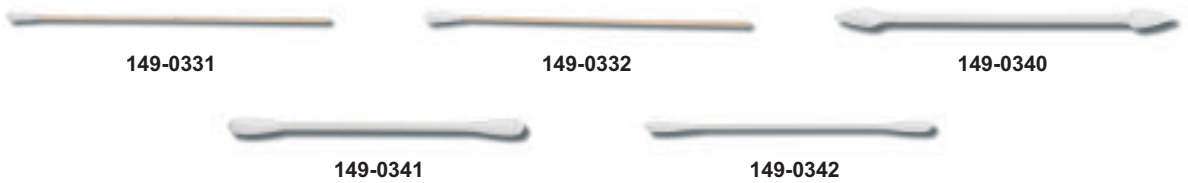
Model	149-0336	149-0335
Head width (mm)	9.5	6.4
Head length (mm)	23.8	19.1
Handle width (mm)	2.5	2.5
Handle length (mm)	152	152
Total length (mm)	176	171

Description	Pk	Cat. No.	
Foam-over-cotton head	500	149-0336	•
Small foam-over-cotton head	500	149-0335	•

Sampling

Bags and Swabs

VWR Critical Swab® , Cotton Head Swabs



- Highly absorbent
- Low-linting formulations reduce contamination
- Economical

Model	149-0342	149-0340	149-0341	149-0331	149-0332
Head width (mm)	3.2	4.7	4.4	4.8	5.9
Head length (mm)	14	11	15	15.9	17.4
Handle width (mm)	1.5	21.5	2.5	2.5	2.5
Handle length (mm)	75.5	82	78	152	152
Total length (mm)	89.5	93	93	168	170

Description	Pk	Cat. No.
Double slim highly absorbent cotton heads, packaged in an anti-static leaf pack, white	2500	149-0342
Double cone-shaped, highly absorbent cotton heads, packaged in an anti-static leaf pack, white	1250	149-0340
Double, highly absorbent cotton heads, packaged in an anti-static leaf pack, white	2500	149-0341
Absorbent cotton tip and wooden shaft, autoclavable	1000	149-0331
Large absorbent cotton tip and wooden shaft, autoclavable	500	149-0332

VWR Critical Swab® , Foam Head Swabs



The VWR Critical Swab® line includes foam head swabs, cotton head swabs, and foam-over-cotton head swabs, suitable for a wide variety of applications. Swabs feature 100 ppi open or closed cell polyurethane foam with 100% virgin polypropylene handle. Swab heads are thermally bonded to the handle without using adhesive. Some have a blue glass-filled polypropylene shaft for extra rigidity, specially for use in critical environments.

- Ideal for use in controlled environments
- Withstand most widely used solvents
- Nonabrasive to protect delicate components

Model	Head width (mm)	Head length (mm)	Handle width (mm)	Handle length (mm)	Total length (mm)
149-0343	1.8	14.6	2.4	161	173
149-0272	3.2	20	2.2	59.7	79.7
149-0271	3.4	20	2.5	50	70
149-0268	3.4	10.5	2.4	57.5	68
149-0270	3.5	10	3.0	79	89
149-0269	3.6	12	3.0	59	71
149-0338	3.6	25.4	2.5	82.8	108
149-0337	3.9	17.5	2.5	83	100
149-0333	4.8	17.4	2.5	152	170
149-0265	4.8	12	4.3	93	105
149-0334	4.8	15.1	3.1	152	167
149-0267	6.2	17	3.2	146	163
149-0266	7	21	4.3	93	114
149-0339	13.5	25.4	5	130	152
149-0264	15	25	6.6	106	131

Description	Pk	Cat. No.
Fine-point reticulated foam head with a blue glass-filled polypropylene shaft	500	149-0343
Micro foam head (open)	500	149-0272
Medium pointed compressed foam head (open)	500	149-0271
Small foam head with flexible tip (open)	500	149-0268
Mini pointed compressed foam head (open)	500	149-0270
Small foam head (open)	500	149-0269
Medium flexible foam head with a nylon handle (closed)	500	149-0338
Cone-shaped reticulated foam head with a blue glass-filled polypropylene shaft	500	149-0337
Foam head with a wooden shaft	500	149-0333
Extended-length reticulated foam head, handle end pointed for dual use, with a blue glass-filled polypropylene shaft	100	149-0265
Paddle-shaped foam head	500	149-0334
Medium foam head (open)	500	149-0267
Large flexible foam head (closed)	100	149-0266
Large rectangular foam head	500	149-0339
Large rectangular foam head (closed)	100	149-0264

Transport Swabs



A range of collection and transport devices for bacterial specimens. Available with different applicators and transport media. Shipment in aluminium packaging under nitrogen ensures longer shelf life.

- A wide range of bacteria can survive for 24-48 hours on the applicator and in the tube
- Proven in many studies with aerobic and anaerobic organisms
- Each swab system is individually wrapped in a pouch with a tamper-proof seal, which turns white when opened

Meets the highest level of classification for medical products: Class IIa - surgical-invasive, short-term application, for taking samples from natural orifices and surgical wounds.



Description	Pk	Cat. No.
Swab, plastic/viscose, Amies gel	50	710-0432
Swab, aluminium/viscose, Amies gel	50	710-0433
Swab, plastic/viscose, Amies gel with charcoal	50	710-0434
Swab, aluminium/viscose, Amies gel with charcoal	50	710-0435
Swab, twisted aluminium/viscose, Amies gel	50	710-0436
Swab, twisted aluminium/viscose, Amies gel with charcoal	50	710-0437
Swab, plastic/viscose, Amies liquid	50	710-0438
Swab, aluminium/viscose, Amies liquid	50	710-0439
Swab, twisted aluminium/viscose, Amies liquid	50	710-0440
Swab, plastic/viscose, Stuart liquid	50	710-0441

Sampling

Bags and Swabs

Swab Systems, M40



The M40 swab system with transport medium improves recovery and ensures the survival of even the most fastidious microorganisms.

- Compliant with NCCLS standards at room temperature and 4 °C
- Without charcoal

Delivery Information: Comprises plastic indicator, rayon tip and Amies gel.

Description	Pk	Cat. No.
M40 swab	50	710-0442



Swabs with Transport Medium



A range of collection and transport devices for bacterial specimens. Conform to the highest classification standard for medical devices: class IIa surgical type device for temporary, one-time use. For collecting samples from the natural orifices of the body and surgical scars. Available with a range of different applicators and transport media.

- Applicator and tube ensure viability of a wide range of bacteria for 24 to 48 hours
- Performance tested for an enormous range of aerobic and anaerobic organisms
- Each swab is packaged individually in a bag with a tamper-proof closure which turns white after opening

Description	Pk	Cat. No.
Wood/cotton tipped, Amies gel	50	710-0424
Wood/cotton tipped, Amies gel with charcoal	50	710-0425
Wood/cotton tipped, Stuart gel with charcoal	50	710-0426
Plastic/viscose, Stuart gel	50	710-0443
Wood/cotton tipped, Stuart gel	50	710-0444
Aluminium/viscose, Stuart gel	50	710-0445
Plastic/viscose, Stuart gel with charcoal	50	710-0446
Plastic/alginate, Amies gel	50	710-0447
Plastic/viscose Cary-Blair gel	50	710-0449



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Swabs



Simple swabs in tubes

High-quality polypropylene suitable for medical uses guarantees that all swab tubes are non-toxic and have low moisture permeability.

- Sterile
- Each tube has a tamper-proof cap
- The batch number, expiry date and the full designation are printed on each tube



Description	Pk	Cat. No.	
Wood/cotton	100	710-0181	•
Aluminium/alginate	100	710-0184	
Plastic/alginate	100	710-0429	•
Aluminium/viscose	100	710-0430	•
Wood/cotton, charcoal	100	710-0456	
Plastic/viscose	100	710-0457	•
Wood/carded cotton	100	710-0458	•
Twisted aluminium/viscose	100	710-0461	•
Plastic/polyester, ATP-free	100	710-0462	•

Simple swabs in peel packs

- Individually sterile packed
- Available in various combinations

Description	Pk	Cat. No.	
Plastic/polyester	1000	710-0459	
Plastic/viscose, 2 per peel pouch	1000	710-0460	
Plastic minitip/viscose	100	710-0463	
Plastic minitip/polyester	100	710-0464	
Wood/cotton	1000	710-0185	•
Plastic/viscose	1000	710-0186	•
Aluminium/viscose	1000	710-0187	•



Swab Rinse Kit, SRK



SRK is an acronym for Swab-Rinse Kits. Swabbing is one of oldest and most widely used methods for microbiological examination of surfaces. When swabs are used together as a kit with a tube of solution to pre-moisten the swab before sampling and then to transport and rinse the swab after sample collection, it is an effective method for the detection and quantification of microorganisms. SRK Rinse Solution is an isotonic salt solution with additional substances to neutralise and inactivate disinfectants and sanitising agents.



- Ideal for quantification of microorganisms with transport at room temperature

Short SRK Swabs (Rayon tip, attached to the tube cap)

Each box contains 50 screw cap tubes. Swab applicators are attached to the tube caps.

Description	Packed	Pk	Cat. No.	
SRK Rinse Solution, 10 ml	Single wrapped in plastic peel pouch	50	710-0477	•
SRK Rinse Solution, 10 ml	50 tubes/ box	50	710-0478	•

Long SRK Swabs (14.6 cm - Separate from cap)

Each box contains 25 pouches (each containing a tube and applicator). Swab applicators are separate from cap.

Description	Packed	Pk	Cat. No.	
SRK Rinse Solution, rayon, 10 ml	Tube and applicator in plastic peel pouch	25	710-0472	•
SRK Rinse Solution, alginate, 10 ml	Tube and applicator in plastic peel pouch	25	710-0473	
SRK Rinse Solution, alginate, 2.5 ml	Tube and applicator in plastic peel pouch	25	710-0476	
SRK Rinse Solution, rayon, 2.5 ml	Tube and applicator in plastic peel pouch	25	710-0431	•

Sampling

Bags and Swabs

Large SRK Swabs (19.50 cm long - Separate from cap)

Each box contains 25 pouches (each containing a tube and applicator). Swab applicators are separate from cap.

Description	Packed	Pk	Cat. No.
SRK Rinse Solution, Fiber tip rayon, 10 ml	Tube and applicator in plastic peel pouch	25	710-0474
SSK - Square Sampling Kit, Fiber tip rayon, 10 ml	Tube, large applicator & sterile 10x10 cm template mask in sterile peel pouch	1 Kit	710-0475

SRK Foam Spatulas

Small spatula attached to cap. Large foam spatula, 22 cm long (612-2678).

Description	Packed	Pk	Cat. No.
SRK Rinse Solution, 10 ml	In plastic peel pouch	50	612-2679
SRK without medium	In plastic peel pouch	50	612-2680
SRK, large, without medium	In plastic peel pouch	120	612-2678

SRK 471

1 Tube + 8 plain swabs in tube, blue applicator in minigrip pack.

Description	Packed	Pk	Cat. No.
SRK Rinse Solution, rayon, 10 ml	6x25 minigrips per case	150	710-0479

Swabs, Steriswabs®



Blue plastic shafted swabs, with 45 mm breakpoint, dry or pre-moistened with sterile diluent, designed for effective monitoring of sterility and contamination in clinically clean or sterile work areas.

- Available in labelled tube or peel pouches
- Triple wrapped and radiation sterilised



Description	Pk	Cat. No.
Steriswab, blue plastic shaft, labelled tube	250	720-0142

Swabs, dry



Available with various applicators and packaging: wood, plastic, straight or twisted wire applicators.

- Suitable for all requirements



Description	Pk	Cat. No.
Wood stick, peel pouch, charcoal	1250	720-2200
Wood stick, peel pouch	800	720-2203
Fine tip, plastic stick, labelled tube	100	720-0122
Plastic stick, labelled tube	100	720-0124
	800	720-0123
Wood stick, labelled tube	100	720-0126
	800	720-0125
ENT, straight wire, labelled tube	100	720-0133
Pernasal, twisted wire	100	720-0137
Wood stick, peel pouch	1250	720-0127
Wood stick, 5/pouch	2500	720-0128
Plastic stick, peel pouch	1250	720-0129
Plastic stick, fine tip, peel pouch	125	720-0130
Wood stick, bulk, nonsterile for autoclaving	5000	720-0131
Wood stick, bulk, sterile	5000	720-0132

Sponge Swabs, Polywipe®

Non-inhibitory sponge material allows effective sampling of larger areas for environmental and hygiene monitoring. Available dry or pre-moistened with sterile diluent. Polywipes are supplied in peel pouches for immediate use, or in a 110 ml blue-capped container for transfer to the laboratory.



- Blue colour for visibility
- Triple wrapped and radiation sterilised

Delivery Information: Supplied with individual sterile glove for handling.

Description	Pk	Cat. No.	
Polywipe, 110 ml container	30	720-0144	•
Polywipe, peel pouch	50	720-0145	•

Swabs for Transport, Transwab®



Each transport tube contains 5 ml of Amie's clear or Amie's charcoal medium which enables deep sample immersion.

- Excellent recovery of both aerobic and anaerobic bacteria

Delivery Information: Each Transwab® unit consists of a sterile easy peel pack containing a plastic, duo or wire applicator with colour coded cap and prelabelled transport tube.

Description	Pk	Cat. No.	
Amies charcoal	125	720-2201	
Amies clear	125	720-2202	
Plain medium	125	720-0138	
Clear wet medium	125	720-0141	
Charcoal medium	125	720-0139	
ENT, straight wire, plain medium	125	720-0140	
ENT, straight wire, charcoal medium	125	720-0119	
Pernasal, twisted wire, plain medium	125	720-0121	
Pernasal, twisted wire, charcoal medium	125	720-0120	

Swabs, Transport, Sterilin®



Plastic applicator, blue cap, rayon tip

Primarily intended for sample collection and transport of bacteria, these swabs contain media for the maintenance of bacteria during transport to the laboratory. The pouch seal turns white on opening, a visible sign of tamper evidence. Each batch of product is tested for performance using a wide range of aerobic and anaerobic pathogens to ensure adequate recoveries, together with sterility and other quality assurance tests.

- Applicator and tube will maintain the survival of a wide range of bacteria for 24-48 hours
- Unique nitrogen flushed aluminium inner bag with laminated film pouch prevent oxidation and dehydration of media
- Each tube is printed with lot number/expiry date and has a tamper evident sleeve, ensuring complete traceability and sterility
- CE marked as Class IIa in accordance with Medical Device Directive 93/42/EEC (for transient invasive use)

Description	Pk	Cat. No.	
Transport swab, Amies	500	720-0026	•
Transport swab, Amies with charcoal	500	720-0027	

Sampling

Bags and Swabs

Swabs



High quality medical grade polypropylene ensures all swab tubes are non-toxic and have a low moisture permeability. Every swab has a tamper evident seal and is printed with lot number, expiry date and full description.



- Supplied sterile

Description	Pk	Cat. No.
Albumin coated	100	720-0059
Plain swab, wood shaft, bulk	2500	720-0025
Plain swab, twisted wire shaft	100	720-0063

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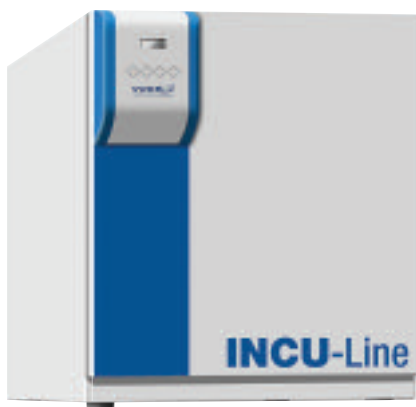
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Incubators, Incu-Line

**Temperature range ambient +5 to 70 °C, volumes 53 l and 115 l**

Incubator with natural air circulation for all standard incubation applications.

- Micro-processor control with large digital temperature display
- Temperature setting in increments of 0.1 °C
- Built-in timer from 0-999 minutes or 00.0-99.9 hours or continuous mode
- Protection against overheating with a visual alarm (safety thermostat K 3.1)
- Ventilation duct on the back of the unit with manually adjustable stop valve

Design: Inner glass doors, chamber made from stainless steel

Shelving: 2 chrome shelves

Safety: Protection against overheating with a visual alarm (safety thermostat K 3.1)

Technical data: Temperature accuracy: ± 0.2 °C; Weight: Incu-line 53; 45 kg, Incu-line 115: 68 kg

Connection: Voltage 50/60 Hz, 230 V

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Pk	Cat. No.
Incu-Line 53, UK plug	53	620x622x680	401x330x401	1	390-0351
Incu-Line 115, UK plug	115	820x732x760	600x480x400	1	390-0354

Accessories

Description	for	Pk	Cat. No.
Chrome-plated shelf	DL 53 / VL 53 / IL 53	1	466-3522
	DL 115 / VL 115 / IL 115	1	466-3523

Small Incubators, B28

Binder

**Temperature range 30 to 70 °C, volume 28 l**

A compact device with hydraulic-mechanical control and adjustable ventilation for precise, reliable incubation conditions. Optimum temperature range at 37 °C.

- Robust and space-saving
- Inner glass door
- Available with or without independent temperature safety regulator TC class 1

Design: The housing is made from galvanised sheet steel and powder-coated throughout to afford maximum protection against corrosion.

Control: Hydraulic-mechanical thermostat with analogue dial thermometer.

Connection: 230 V, 50/60 Hz, 253 W

Technical data: Weight 22 kg

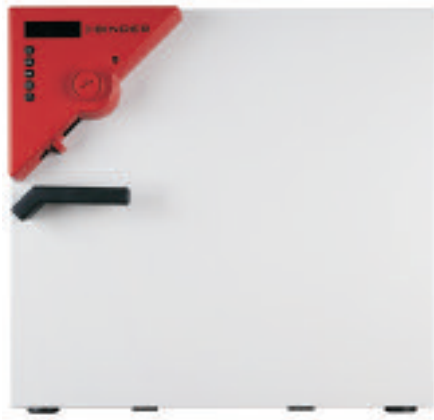
Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Shelves supplied / max.	Pk	Cat. No.
B 28, without temperature regulator TC class 1	28	580x425x402	400x250x280	2/4	1	390-6032
B 28, with temperature regulator TC class 1	28	580x425x402	400x250x280	2/4	1	390-6033

Cell Culture

Incubators

Microbiological Incubators, with or without Forced Convection, BD and BF Series

Binder



Temperature range ambient +5 to 100 °C, volume 20 to 720 l

APT. line™ incubators distinguish themselves from all others due to their superior temperature accuracy. Two incubator versions are available depending on the application: The BD series with natural convection for all standard applications, the BF series with forced convection for applications with high load density and particularly fast temperature recovery times. The advantage of the BF series with forced convection is based on extremely precise temperature distribution within the incubator, even with high load density, and fast temperature recovery time after the door has been opened. APT.line™ incubators meet all quality requirements for uniform, reproducible incubation conditions. Their broad temperature range and high-performance equipment mean that the BD and BF series can be used for all incubation tasks in research, production and quality assurance.

- Temperature variation at 37 °C: ±0.5 °C (BD series), ±0.4 °C (BF series)
- Additional safety is provided with disinfection at 100 °C and easy operation
- High degree of temperature accuracy, and fast temperature recovery time after the door has been opened
- Adjustable fan speed (BF series)
- Additional options and accessories

Design: Units up to 115 litres can be stacked on top of each other to save space.

Shelves: Supplied with 2 chrome-plated racks.

Cleaning: Easy to clean design. Residue-free cleaning of entire inner chamber and inner glass door.

Safety: Temperature safety device class 3.1, provides full protection against chamber over-temperature, with visual alarm.

Controller: Electronically controlled APT.line™ preheating chamber, DS controller with integrated timer 0 to 99 h (BD series), MS controller with several timer functions such as 'Delayed OFF' and 'Delayed ON' (BF series) and adjustable ventilation by means of rear exhaust duct, Ø 50 mm with ventilation flap and front ventilation slide.

Connections: BD series has RS422 interface for communication software, switchable to printer output with RS 232/RS422 interface (BF series), nominal voltage 230 V.

Calibrations and validations possible, please enquire. Supplied with Binder test certificate.

Models with natural convection

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Pk	Cat. No.
BD 23	20	433x516x492	222x277x330	1	390-6146
BD 53 (E2)	53	634x575x617	400x330x400	1	390-6037
BD 115 (E2)	115	834x645x702	600x400x480	1	390-6039
BD 240 (E2)	240	1034x745x822	800x500x600	1	390-6041
BD 400 (E2)	400	1234x765x1022	1000x500x800	1	390-6034
BD 720 (E2)	720	1234x865x1528	1000x600x1200	1	390-6035

Models with forced convection

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Pk	Cat. No.
BF 53	53	634x575x617	400x330x400	1	390-0006
BF 115	115	834x645x702	600x400x480	1	390-0007
BF 240	240	1034x745x822	800x500x600	1	390-0008
BF 400	400	1234x765x1022	1000x500x800	1	390-0009
BF 720	720	1234x865x1528	1000x600x1200	1	390-0010

Accessories for Incubators

Binder

Shelves

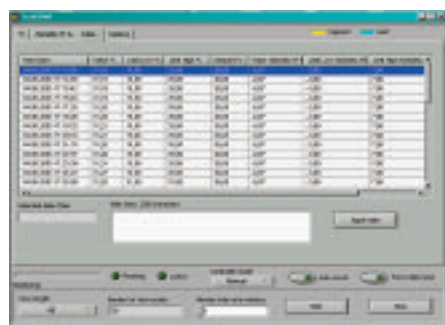
for	Material	Pk	Cat. No.
ED/FD/BD/KB 23	Chrome-plated	1	390-6018
E/B 28	Chrome-plated	1	390-6000
ED/FD/FED/BD/KB/M/MK 53	Chrome-plated	1	390-6001
ED/FD/FED/FDL/MDL/BD/KB/KBF/M 115	Chrome-plated	1	390-6002
ED/FD/FED/BD/KB/KBW/KBWF/KBF/M/MK 240	Chrome-plated	1	390-6003
ED/FED/BD/M 400	Chrome-plated	1	390-6004
ED/FED/BD/KB/KBW/KBWF/KBF/M 720	Chrome-plated	1	390-6005
ED/FD/BD/KB 23	Stainless Steel	1	390-6019
ED/FD/FED/BD/KB/M/MK 53	Stainless Steel	1	390-6006
ED/FD/FED/FDL/MDL/BD/KB/KBF/M 115	Stainless Steel	1	390-6007
ED/FD/FED/BD/KB/KBW/KBWF/KBF/M/MK 240	Stainless Steel	1	390-6008
ED/FED/BD/M 400	Stainless Steel	1	390-6010
KB/KBW 400	Stainless Steel	1	390-6017
ED/FED/BD/KB/KBW/KBWF/KBF/M 720	Stainless Steel	1	390-6009

Perforated shelves, stainless steel

for	Pk	Cat. No.
ED/FD/BD/KB 23	1	390-0001
E/B 28	1	390-6011
ED/FD/FED/BD/KB/M/MK 53	1	390-6012
ED/FD/FED/FDL/MDL/BD/KB/KBF/M 115	1	390-6013
ED/FD/FED/BD/KB/KBW/KBWF/KBF/M/MK 240	1	390-6014
ED/FED/BD/M 400	1	390-6015
KB/KBW 400	1	390-0000
ED/FED/BD/KB/KBW/KBWF/KBF/M 720	1	390-6016

Software, data logging, APT-COM™ 3 DataControlSystem

Binder



With the APT-COM™ 3 DataControlSystem, Binder offers data communications software which fulfils all FDA regulations with respect to data safety. The structure of the programme interface is user-friendly and allows clear and easy recording of measurement values and data administration. APT-COM™ 3 DataControlSystem is fully network-compatible. All data is available at any time via intranet or internet. The current process parameters can be retrieved online as HTML-files. Measurement values can also be looked at from home at anytime. Alert messages only have to be transferred to preset telephone numbers including in the mobile network. According to the computer hardware configuration, with APT-COM 3™ up to 30 Binder laboratory instruments can be integrated and controlled using a standardised operator interface. The integration of APT-COM 3™ under LIMS (for instance with Labview) is also possible. The wealth of registering and monitoring

functions with variable graphs allows for safe working and complete logging of measurement data.

APT- COM™ 3 is available at three different performance levels:

- 1) **Full Version** for applications according to FDA Directive 21 CFR part 11 in the GLP/GMP range
- 2) **Standard Version** with restricted data safety features
- 3) **Basic Edition** for simple data logging

Characteristics of the GLP/GMP Version of APT-COM™ 3 DataControlSystem: Matches FDA Directive 21 CFR part 11 with respect to

Cell Culture

Incubators

- Individual user authorisation and identification through password protected access control or electronic signature
- Complete and detailed Audit Trail for all system interventions
- Data storage with protection against manipulation
- Automatic data backup
- Validability of overall system

Description	Pk	Cat. No.
APT-COM™ 3 Full (GMP/GLP) Version software	1	390-0235
APT-COM™ 3 Standard Version software	1	390-0233
APT-COM™ 3 Basic Edition software	1	390-0234

Incubators, Natural Convection, INB, INE and INP Series

Memmert



Temperature range: ambient +5 to 70, volumes 32 to 749 l

Stainless steel incubators with natural convection, which are available in different performance classes, BASIC, EXCELLENT or PERFECT.

- BASIC 'INB' - the most inexpensive models
- EXCELLENT 'INE' - for more exacting requirements
- PERFECT 'INP'- perfection in temperature control and sterilisation with Steri-Card

For batches that are particularly heat-sensitive or valuable, the EXCELLENT or PERFECT range models are ideal. The incubators are equipped with large area, 4-sided, all-round heating and double doors (glass inner door, stainless steel outer door). The fresh air supply can be adjusted manually via the pre-heating chamber (electronically regulated on the PERFECT model with air valve controller). The units are equipped with dual over-temperature protection (multiple protection and class 3.1 on PERFECT models).

The BASIC model:

- Integral digital timer from 1 min. to 99 hr. 59 min.
- LED display of setpoint and actual temperatures and remaining programme time
- PID controller

EXCELLENT and PERFECT models:

- Real-time weekly programme timer, ramp timer for 40 variable ramps, each from 1 min. to 999 hr.
- Long-term logging of all relevant data via 1024 kB ring buffer
- RS232 serial interface with 'Celsius' programming and logging software
- Adaptation of effective heating power depending on setpoint
- 2 High-grade platinum temperature sensors PT 100 in a 4-wire circuit for stable long-term transmission of measurement signals

The PERFECT model also features

- Printer interface
- 32 kB MEMory Card for programming and documenting up to 40 ramps
- STERICard with fixed programme for inner chamber sterilisation at 160 °C for 4 hours
- Manufacturers calibration certificate at 37 °C
- Visualisation of all process functions on the display, with additional language selection via set-up for alphanumeric text display

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Shelves supplied /		Pk	Cat. No.
				max.			
BASIC INB 200	32	550x400x600	400x250x320	1/3		1	390-0269
BASIC INB 300	39	630x400x600	480x250x320	1/3		1	390-0297
BASIC INB 400	53	550x480x680	400x330x400	2/4		1	390-0298
BASIC INB 500	108	710x550x760	560x400x480	2/5		1	390-0299
EXCELLENT INE 200	32	550x400x600	400x250x320	1/3		1	390-0300
EXCELLENT INE 300	39	630x400x600	480x250x320	1/3		1	466-5060
EXCELLENT INE 400	53	550x480x680	400x330x400	2/4		1	390-0301
EXCELLENT INE 500	108	710x550x760	560x400x480	2/5		1	390-0302
EXCELLENT INE 550	153	630x650x920	480x500x640	2/7		1	390-0324
EXCELLENT INE 600	256	950x650x920	800x500x640	2/7		1	390-0303
EXCELLENT INE 700	416	1190x650x1080	1040x500x800	2/9		1	466-5061
EXCELLENT INE 800	749	1190x750x1620	1040x600x1200	2/14		1	466-5062

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Shelves supplied /		Cat. No.
				max.	Pk	
PERFECT INP 200	32	550x400x600	400x250x320	1/3	1	390-0304
PERFECT INP 300	39	630x400x600	480x250x320	1/3	1	390-0305
PERFECT INP 400	53	550x480x680	400x330x400	2/4	1	390-0306
PERFECT INP 500	108	710x550x760	560x400x480	2/5	1	390-0307
PERFECT INP 550	153	630x650x920	480x500x640	2/7	1	390-0325
PERFECT INP 600	256	950x650x920	800x500x640	2/7	1	390-0308
PERFECT INP 700	416	1190x650x1080	1040x500x800	2/9	1	390-0309
PERFECT INP 800	749	1190x750x1620	1040x600x1200	2/14	1	390-0310

Microbiological Incubators, Heraeus® Function Line

Thermo Scientific



390-0037



Temperature range ambient +5 to 70 °C, volumes 64 to 233 l

All Heraeus® Function Line incubators are designed for unsupervised long-term operation. These compact units provide maximum possible volumes with the smallest possible footprint, and are equipped with all the essentials needed to perform cost-effectively in a wide range of laboratory environments. With corrosion-resistant stainless steel interiors and removable perforated shelves, Function Line models are easy to clean and decontaminate.

- Small footprint, but large usable space inside
- Configured for unsupervised long-term operation
- Simple to adjust and easy to clean
- Superior temperature homogeneity and fast recovery times
- Safe and reliable

Cleaning and disinfection: These incubators are exceptionally easy to clean and disinfect, with rounded edges and corners on all chambers. Easily replaceable silicone door seals and quickly dismantled glass doors mean that the usable space can be cleaned thoroughly, safely and easily.

Control: Convenient temperature control with preset programme steps (up to 70 °C). The temperature is controlled by precise microprocessor controllers with a large, easily readable display. A timer with a range from 1 minute to 99 hours for switching the device on and off is integrated in the controller. Pre-configured temperature-time programmes provide further advantages, such as fixed heating and cooling ramps, delayed heater activation or heating to a pre-selected temperature and selection of a temperature maintenance time. These functions can be selected individually or in any combination. A standby function ensures that the temperature display continues to operate when the heater is switched off.

Connections: Mains connection 230 V, single phase AC, 50/60 Hz, 320-570 W (depending on the model), RS232 interface.

Technical data: Temperature deviation; spatial ±1 °C, temporal ± <0.5 °C. Weight 40-75 kg (depending on model)

Accessories: Recirculating incubators upon request.

Standards: Protection class 3.1, DIN 12 880, parts 1+2

Models with natural convection

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Shelves supplied		Cat. No.
				/ max.	Pk	
B 6	73	552x540x700	408x344x459	2/9	1	390-1310
B 12	131	696x540x850	552x344x610	2/14	1	390-1320
B 20	233	754x720x910	610x514x672	2/16	1	390-1330

Cell Culture

Incubators

Models with forced convection

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Shelves supplied		Pk	Cat. No.
				/ max.			
UB 6	64	552x540x700	408x344x459	2/9		1	390-0037
UB 12	112	696x540x850	552x344x610	2/14		1	390-0038
UB 20	210	754x720x910	610x514x672	2/16		1	390-0039

Shelves for Function Line

Description	Pk	Cat. No.
Shelf stainless steel for B 20 and UB 20	1	390-1311
Shelf stainless steel for B 12 and UB 12	1	390-1321
Shelf stainless steel for B 6 und UB 6	1	390-1331

Microbiological Incubators, Heraeus® Series 6000

Thermo Scientific



Temperature range ambient +5 to 70 °C, volumes 30 to 750 l

Extensive range of standard equipment with uniquely modular design that allows them to be configured to meet specific individual needs. Optimal, homogeneous and stable environment provides temperature uniformity and stability, ensuring fully reproducible, high quality results. Larger models are available with forced air circulation (UB) for superior temperature homogeneity. Door seals are made of silicone and can be easily replaced. Left-hinged and lockable doors available on request. Other accessories available on request.

- Electronically regulated temperature (PID action)
- Protection from overheating with separate sensor
- Short heating-up times and high temperature stability

- Minimal temperature overshoot

Design: Robust exterior made of galvanised, pre-coated sheet steel. Stainless steel incubator chamber and cover plates. Stainless steel interior heater. Modular operating and control unit. With damper to control extracted air as standard. Right-hinged doors as standard.

Cleaning: Corrosion-resistant stainless steel chamber with rounded corners and interior fixtures, easy to clean.

Control: Temporal temperature stability of 0.5 °C according to DIN 58945, electronically controlled, with PID action, Kelvitron® and non-contacting switching component for wear-free, noiseless heater switching. Actual and set point temperature are displayed digitally. Kelvitron® microprocessor controller, RS232 computer interface, 24-hour timer and temperature monitor (class 2, DIN 12880, part 1).

Safety: Electrical equipment in line with VDE 0700. All sizes are GS and SEV tested. Protection class IP 20. Constructed according to DIN 12880. Adjustable overheating monitor (protection class 3.1) as standard.

Connections: 230 V, 50/60 Hz, 0.26-1.20 kW (according to model) in addition to the RS232 digital interface there is the option of temperature documentation via analogue signals.

Models with natural convection

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Shelves supplied		Pk	Cat. No.
				/ max.			
B 6200	196	895x715x840	554x550x644	2/18		1	390-1140
B 6030	30	552x535x576	352x370x231	1/4		1	390-1110
B 6060	60	744x535x576	403x370x380	2/9		1	390-1120
B 6120	107	895x535x720	554x370x524	2/14		1	390-1130
B 6420	409	744x715x1813	544x550x1366	2/39		1	390-1150
B 6760	751	1200x715x1813	1000x550x1366	2/39		1	390-1160

Models with forced convection

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Shelves supplied		Pk	Cat. No.
				/ max.			
UB 6420	409	744x715x1813	544x522x1319	2/39		1	390-0040
UB 6760	751	1200x715x1813	1000x522x1319	2/39		1	390-0041

General Purpose Incubators, Genlab



Temperature range ambient +5 to 70 °C (200 litre: ambient +8 to 70 °C), volume 50 to 200 l

A range of efficient, reliable, cost effective incubators ideal for biological analysis, research and general laboratory applications.

- Fluctuation ± 0.25 °C at 37 °C
- 200 litre model has fan assisted circulation, other models shown are supplied with natural convection, but are available with optional fan
- Temperature range is ambient +8 for 200 l model and ambient +5 for all other models
- Units have double door (solid outer, clear glass inner) and microprocessor digital controller which displays both set and actual temperature
- Microprocessor digital controller is configured for each individual unit to

optimise the heat up, minimise the overshoot and control of the temperature

Design: There are two designs, INC and MINI to facilitate operation, depending on the location of the incubator. The INC has a horizontal style with the controls fitted to one side of the door. The MINI has a vertical style where the controls are fitted below the door near the base and would be less suitable for underbench locations. All the models listed below feature an exterior of sheet steel, finished in an easy clean powder coated paint; a stainless steel inner chamber and double doors, comprising steel outer with an inner glass door for easy sample viewing. Units are heated by means of Incoloy sheathed elements; positioned below the chamber floor for natural convection units and fitted around the fan on the back or side wall of the chamber for fan assisted units (200 litre only). The top vent is fitted with a clip to hold a mercury in glass thermometer.

Shelves: All units have fixed shelf runners and chrome plated wire grid shelves. MINI/6 has one shelf, MINI/30, INC/50 and INC/75 units are supplied with 2 shelves, INC/100, INC/125 and INC/150 have 3, INC/200 has 4 shelves.

Control: The control system comprises a Microprocessor digital PID controller with dual displays of set point and actual temperature. The control system comprises a direct reading thermostat and over-temperature thermostat, both with calibrated scales and tamper-proof locks. They also include main switch with indicator and heat and overheat indicators.

Accessories: A wide range of options and accessories is available, including models with mild steel coated with aluminium (CLAD) chambers, fan circulation and doors with integral viewing window. High capacity units up to 1250 litres are also available, please enquire for details.

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Pk	Cat. No.
MINI/6	6	320x330x390	230x190x150	1	390-0337
MINI/30	30	480x490x500	360x350x240	1	390-0336
INC/50	50	730x470x570	410x340x420	1	390-0356
INC/75	75	850 470x570	530x340x420	1	390-0357
INC/100	100	850x590x570	530x460x420	1	390-0346
INC/125	125	850x590x680	530x460x520	1	390-0347
INC/150	150	850x660x680	530x540x520	1	390-0348
INC/200	200	850x660x870	490x540x750	1	390-0349



Cell Culture

Incubators

Incubators, Roll-In, Standard and CO₂ Wheaton



Temperature range ambient +8 to +70 °C, **volume** 1132 litres

These incubators are an ideal space saving and economical alternative to a warm room for small production runs. Designed specifically for use with the Wheaton roller culture apparatus, they can also be used in combination with optional shelves to accomodate spinner flasks, rocker tables and other equipment.

- Forced air circulation with digital temperature control gives temperature stability of ±0.5 °C at 37 °C (without shelves)
- Units have a viewing window in the door and four internal electrical outlets for shakers, stirrers etc.
- CO₂ incubator has light weight lifting ramps for rolling in roller culture apparatus
- CO₂ range 0-20%, gas shuts off when door is opened or switch is turned off

Design: Units have a painted steel exterior , the standard models have a painted steel interior and CO₂ models have stainless steel interiors. Their double walled construction provides temperature stablity and is easy to clean.

Shelves: Supplied without shelves, which are available separately, units can accommodate a maximum of 12 shelves.

Cleaning: Inner chamber is easy to clean.

Safety: Features include independent over-temperature safety protection.

Controller: Digital indicator and keypad, settings are maintained if power is interrupted.

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Pk	Cat. No.
Roll-In CO ₂ incubator, UK-plug	1132	1042x864x2210	890x660x1930	1	390-0165
Roll-In standard incubator, UK-plug	1132	1042x864x2210	890x660x1930	1	390-0163

Shelves

Description	for	Pk	Cat. No.
Shelf	Roll-In incubators	1	390-0164

Refrigerated Incubators, KB Series

Binder



Temperature range -5 to +100 °C, **volumes** 20 to 700 l

Refrigerated incubators are mainly used for culturing tasks that need to be carried out at temperatures below room temperature or if high ambient temperatures cannot be avoided. The DCT™ cooling system, in conjunction with the APT.line™ temperature technology, provides ideal conditions assuring temperature accuracy and reproducible results in both heating and cooling situations - with minimal dehumidification of specimens and impressive performance. The DCT™ cooling system and the controllable fan guarantee high degrees of humidity even during cooling mode or prolonged testing, to protect samples from drying out.

- APT.line™ preheating chamber technology
- Adjustable fan speed
- Foam insulation, contains no FCHCs, environmentally friendly refrigerant R 134a
- Temperature deviation: ±0.2 °C at 25 °C

Design: Internal glass door. Units up to 115 litres can be stacked on top of each other to save space.

Shelves: Supplied with 2 chrome-plated racks.

Cleaning and disinfection: Hot air sterilisation at 100 °C.

Safety: Independent adjustable temperature safety device, Class 3.1 (DIN 12880) with visual and acoustic alarm.

Controller: Electronically controlled APT.line™ preheating chamber and DCT™ refrigeration system. Microprocessor programme controller, with LED display, with 2 programmes each with 10 sections; alternatively 1 programme with 20 sections and various timer functions; temperature monitor Class 3.1 (DIN 12880); elapsed time indicator.

Connections: DataControl system, or can be switched to printer with RS232/RS422 port converter; adjustable printing intervals; RS422 port for APT-COM™ communication software RS 422 interface for communication software, or switch over to printer output with RS 232 / RS 422 interface converter, nominal voltage 230 V.



Calibrations and validations possible. Supplied with Binder test certificate.

Technical data: Temperature fluctuation: ± 0.1 °C; Nominal power: 460 W (KB 53), 930 W (KB240), 1350 W (KB 720).

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Pk	Cat. No.
KB 23	20	433x516x618	222x277x330	1	390-6076
KB 53	53	634x576x837	400x330x400	1	390-6080
KB 115	115	834x646x1022	600x400x480	1	390-6081
KB 400	400	884x716x1850	650x470x1308	1	390-6083
KB 720	700	1234x867x1816	1000x600x1168	1	390-0358

Cooled Incubators, ICP Series

Memmert



Temperature range 0 to +60 °C, volumes 53 to 749 l

Compressor-cooled incubators with finely tuned control technology, Memmert's PERFECT controller, which ensures deviations from the setpoint are minimised, guaranteeing the safety of temperature-sensitive living cultures at all times. Ideal for use where rapid and precise changes between heating up and cooling down phases in ramp operation are called for.

- Air jacketted heating system, rapid and precise temperature control, no possibility of the load drying out as the thermal jacket is separated from the interior, so the chamber does not dehumidify
- Integrated timer for temperature profiles of up to 40 ramps, each segment adjustable from 1 min up to 999 h
- Fan speed can be controlled and set in increments of 10% from 10% to 100% via controller
- Safety features include the Automatic Safety Function for over- and under-temperature, automatically follows the setpoint in a selectable tolerance range, protection Class 3.3
- Autodiagnostic system with fault indication and highly efficient automatic

defrosting system

Design: Units have easy-to-clean stainless steel interior, with deep drawn ribbing, inner glass door, and stainless steel outer shell.

Shelves: 2 perforated stainless steel shelves, choice of 4 to 14 shelf positions depending on size of incubator.

Cleaning and disinfection: Corrosion-resistant stainless steel chamber and interior fixtures, easy to clean due to shape and material.

Control: Multifunctional microprocessor 'PERFECT' PID-controller with 8-digit alphanumeric digital display, digital 7-day-programme timer with real time clock, precise minute setting, for one set value or start of ramp operation.

Safety: Independent, digital adjustable electronic microprocessor overtemperature controller, TWW protection class 3.3.

Connections: USB interface.

Technical data: Temperature deviation: $< \pm 0.1$ °C in real time.

Calibration: Calibration and validation to assist with GLP compliance are possible, please enquire.

Accessories: Wide range of options including day/night simulation (24-hour cycle) programmable in conjunction with interior lighting or programming and documentation using interfaces, Celsius software, integrated log memory and chip cards. Please ask for details.

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Pk	Cat. No.
ICP 400	53	400x330x400	558x486x967	1	466-5209
ICP 500	108	718x556x1047	560x400x480	1	466-5056
ICP 600	256	958x656x1335	800x500x640	1	466-5210
ICP 700	416	1198x656x1495	1040x500x800	1	466-5057
ICP 800	749	1198x756x1895	1040x600x1200	1	466-5058

Cell Culture

Incubators

Cooled Incubators with Peltier, Forced Convection, IPP Series
Mettmert



Temperature range 5 to 70 °C, volumes 32 to 108 l

These accurate cooled incubators are designed for use in the temperature range from 5 to 60 °C. The forced air circulation in the interior is created by the Peltier circulation fan. All process functions are visible, additional language selection via set-up is possible.

All relevant data is logged for the long term by a 1024 kB ring buffer serving as a data logger. Multiple over-temperature protection is provided by an audible and visual alarm. USB serial interface with 'Celsius' programming and logging software, and a 32 kB MEMory card are also included. The ramp timer is designed for 40 variable ramps, each from 1 min to 999 h. The glass operating panel has a multifunction wideband display and input module.

- Maximum safety for sensitive samples, unsurpassed environmental features
- Adaptive, fuzzy-supported multifunctional 'PERFECT' PID process controller
- Energy consumption reduced by up to 90%, no cooling medium (no refrigerant waste) and minimal noise

- Safety features include the Automatic Safety Function for over- and under-temperature, automatically follows the setpoint in a selectable tolerance range, protection Class 3.3
- Condensation, which is physically unavoidable, forms outside in the cooling element, not in the interior (no dripping water)

Design: Units have easy-to-clean stainless steel interior, with deep drawn ribbing, inner glass door, and stainless steel outer shell.

Shelves: IPP 200 and IPP 300 have 1, other units supplied with 2 perforated stainless steel shelves, choice of 3 to 5 shelf positions depending on size of incubator.

Cleaning and disinfection: Corrosion-resistant stainless steel chamber and interior fixtures, easy to clean due to shape and material.

Control: Multifunctional microprocessor 'PERFECT' PID-controller with 8-digit alphanumeric digital display, digital 7-day-programme timer with real time clock, precise minute setting, for one set value or start of ramp operation.

Safety: independent, digital adjustable electronic microprocessor overtemperature controller, TWW protection Class 3.3.

Connections: USB interface.

Technical data: Temperature deviation: < ±0.1 °C in real time.

Calibration: Calibration and validation to assist with GLP compliance are possible, please enquire.

Accessories: Wide range of options including interfaces, Celsius software and chip cards. Please ask for details.

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Pk	Cat. No.
IPP 200	32	550x490x600	400x250x320	1	390-0270
IPP 300	39	630x490x600	480x250x320	1	390-0238
IPP 400	53	550x550x680	400x330x400	1	390-0271
IPP 500	108	710x620x760	560x400x480	1	390-0272



Stocked articles in our UK warehouse are marked with a green dot



Articles stocked in our European warehouses are marked with an amber dot



Please contact your local sales office for more information

Low Temperature Incubator, Heraeus® BK 700

Thermo Scientific



Temperature range 3 to 40 °C, volume 190 l

For incubating cultures at low temperatures.

- Electronic, 3-point thermostat
- Condensation-free inner chamber
- Integral timer

Design: The inner housing is made from impact-resistant plastic. A magnetic strip ensures easy opening and closing of the cabinet door. Soft-Touch control panel with digital temperature display and status display for cooling, heating and alarm. This incubator is designed for using magnetic stirrers or other equipment inside the unit.

Control: An integral timer (1-9999 min to 7 days) switches on 2 sockets located in the inner chamber and enables cyclical and reproducible tests with accessories such as magnetic stirrers. 3-Point temperature controller.

Connections: 230 V, 50/60 Hz, 230 W, 2 sockets in the usable space.

Technical data: Temperature deviation: temporal ± 1 °C, spatial ± 1 °C; cooling time from 25 to 5 °C 48 minutes; weight 46 kg.

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Shelves supplied /		Cat. No.
				max.	Pk	
BK 700	190	540x560x1295	440x435x995	3/14	1	392-0400

Cooled Incubators, Genlab



390-0332



390-0335

Temperature range +2 to 50 °C, volumes 50 to 280 l

Range of accurate, efficient and economical cooled incubators that are ideal for a wide range of research, testing and general laboratory applications.

- All units have fan assisted air circulation for even temperature distribution throughout the chamber
- Units have an "intelligent switch" built into the digital controller that automatically switches the cooling compressor off, at a set point, and when temperatures above ambient are required, to conserve energy
- User can leave the unit unattended and can be confident that the minimum amount of energy is being used for the incubator performance

Design: Exterior is mild steel finished in white enamel paint. Durable, easy to clean moulded plastic inner chamber fitted with a stainless steel back plate.

Shelves: All units are fitted with integral shelf runners and removable plastic coated wire grid shelves. CI/50 is supplied with 2 shelves, CI/100 has 3, CI/200 has 6 and CI/250 has 7 shelves.

Control: The control system comprises a microprocessor digital PID controller with dual displays of set point and actual temperature.

Cell Culture

Incubators

Accessories: A wide range of options and accessories is available, including timers, fully programmable controllers, communication and access ports, interior lights, internal 13 amp sockets, viewing window, audible and visual alarms and chart recorders. Please enquire for details.

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Pk	Cat. No.
CI/50	50	500x550x750	420x300x470	1	390-0335
CI/100	100	500x630x950	420x380x680	1	390-0332
CI/200	200	530x660x1570	420x380x1300	1	390-0333
CI/280	280	640x640x1900	440x410x1620	1	390-0334

Cooled Incubators, Series 3



Temperature range -10 to +50 °C, volumes 90 to 450 l

Series 3 cooled incubators are temperature controlled cabinets with fan assisted air circulation via a pre-mixing chamber. They are ideal for studying growth patterns of plants and insects, BOD tests, seed germination, tissue culture, enzyme testing and fruit fly culture.

- Units feature automatic defrost
- Easy to use controls with digital display of actual temperature
- Hermetically sealed refrigeration system, and suppressed RF and TV electronics
- Full PID heating control to ensure stable internal temperature

Design: The units have a white enamelled sheet steel exterior, stainless steel lined interior with polyurethane foam insulation, and feature a door lock and magnetic door gasket.

Shelves: Supplied with white plastic coated wire shelves and self evaporating condensate drip tray.

Cleaning: Corrosion resistant inner chamber is easy to clean, disinfection procedures are detailed in the user manual.

Safety: Features include variable over-temperature alarm, safety cutout preset at 70 °C and refrigeration isolation switch.

Controller: Controls are recessed in the control panel, to avoid accidental alteration. Full PID heating control, indicator for temperature overheat alarm.

Connections: 230 V, 50/60 Hz, RS 232 interface.

Technical data: Average temperature variation of ±0.5 °C and fluctuation of ±0.1 °C with an average load. Heating time 20 to 45 °C in 30 min, cooling time 20 to 0 °C in 50 min, subject to load and ambient temperature.

Calibrations: Optional conformance certificate and on-site UKAS Accreditation of laboratory equipment are available. Please enquire for details.

Accessories: Extensive range of accessories and factory fitted options, such as interior programmable fluorescent/ UV lighting, inner perspex door, manual high/low temperature alarms (audible and visible) with safety cut-out, built in chart recorder, RS485 interface and access ports are available on request, please enquire for further details. Please note: if application involves Drosophila, a modification for aggressive environments is required, please contact us before placing your order. Fully programmable models are available.

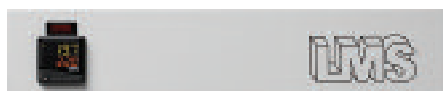
Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Shelves supplied / max.	Pk	Cat. No.
100W	90	610x600x810	540x440x490*	2/5**	1	390-0081
200W	227	680x570x1470	550x450x920*	3/20**	1	390-0085
300W	290	680x570x1780	550x450x1170*	3/25**	1	390-0089
400W	450	680x860x1780	550x700x1170*	3/25**	1	390-0096

Dual temperature cycling models are available please enquire.

* Internal dimensions shown above are maximum dimensions, internal usable space will be less due to space occupied by refrigeration system.

** Please note that with the maximum number of shelves fitted in a cabinet, there is only a 20 mm gap between each shelf.

Cooled Incubators, Series 3, Programmable



Temperature range -10 to +50 °C, volumes 90 to 450 l

The programmable option for LMS Series 3 cooled incubators is designed to offer the highest functionality and enables the user to set up and run complex processes relying on accurate temperature control. The programmer function is able to control

applications needing set point changes over time, e.g. ramp changes where a gradual rate of change can be set, or step changes which are instantaneous. These can be separated by soak periods during which the process is held at a constant value. Each individual time interval of the program, or segment, together with its associated moving set point value, can be stored as a unique program. Via use of "event outputs" control of interior illumination and/or alarm function is also available. At the end of a sequence, a program can be arranged to repeat (or loop), either a specified number of cycles or continuously. For safety reasons, three modes of recovery from power failure are available. These either automatically re-start the program from the beginning, continue it from where it stopped or hold it, waiting for a user re-start. Finally, chart-recorder, data-logging and configuration software for windows is available as optional extras. This software is designed to operate to program all functions of the controller and to data log the recorded process signals, including chart recorder for on screen viewing of trends, virtual instrument display, on-screen alarm displays and remote set point adjustment. For full details of incubator specifications see Series 3.

- Units feature automatic defrost
- Easy to use controls with digital display of actual temperature on the standard controller or display of both set point and actual temperature on the programmable controllers
- Hermetically sealed refrigeration system, and suppressed RF and TV electronics
- Full PID heating control to ensure stable internal temperature

Type	Inner		Shelves supplied /			
	volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	max.	Pk	Cat. No.
100WNP	90	610x600x810	540x440x490*	2/5**	1	390-0082
200WNP	227	680x570x1470	550x450x920*	3/20**	1	390-0086
300WNP	290	680x570x1780	550x450x1170*	3/25**	1	390-0090
400WNP	450	680x860x1780	550x700x1170*	3/25**	1	390-0097

* Internal dimensions shown above are maximum dimensions, internal usable space will be less due to space occupied by refrigeration system.

** Please note that with the maximum number of shelves fitted in a cabinet, there is only a 20 mm gap between each shelf.

Cooled Incubators, Series 4



Temperature range -10 to +50 °C, volumes 600 to 1200 l

Series 4 cooled incubators are temperature controlled cabinets with fan assisted air circulation via a pre-mixing chamber. They are ideal for studying growth patterns of plants and insects, BOD tests, seed germination, tissue culture, enzyme testing and fruit fly culture.

- Units feature automatic defrost
- Easy to use controls with digital display of actual temperature
- Hermetically sealed refrigeration system, and suppressed RF and TV electronics
- Full PID heating control to ensure stable internal temperature

Design: The units have a stainless steel exterior, stainless steel lined interior with polyurethane foam insulation, and feature a door lock and magnetic door gasket.

Shelves: Supplied with white plastic coated wire shelves and self evaporating condensate drip tray.

Cleaning: Corrosion resistant inner chamber is easy to clean, disinfection procedures are detailed in the user manual.

Safety: Features include variable over-temperature alarm, safety cutout preset at 70 °C and refrigeration isolation switch.

Controller: Controls are recessed in the control panel, to avoid accidental alteration. Full PID heating control, indicators for mains and high temperature safety cut-out.

Connections: 230 V, 50/60 Hz, RS 232 interface.

Technical data: Average temperature variation ± 0.5 °C and fluctuation of ± 0.1 °C with an average load. Heating time 20 to 45 °C in 30 min, cooling time 20 to 0 °C in 50 min, subject to load and ambient temperature.

Calibrations: Optional conformance certificate and on-site UKAS Accreditation of laboratory equipment are available. Please enquire for details.

Cell Culture

Incubators

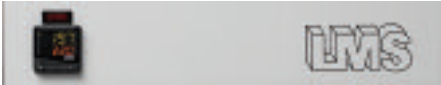
Accessories: Extensive range of accessories and factory fitted options such as, interior programmable fluorescent/ uv lighting, inner perspex door, manual high/low temperature alarms (audible and visible) with safety cut-out, built in chart recorder, temperature programmers, temperature controllers, RS485 interface and access ports are available on request, please enquire for further details. Please note: if application involves Drosophila, a modification for aggressive environments is required, please contact us before placing your order. Fully programmable models are available.

Shelves supplied						
Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	/ max.	Pk	Cat. No.
600W	600	690x800x2000	540x670x1460	5/24*	1	390-0099
600WA	600	690x800x2000	540x670x1460	5/24*	1	390-0168
1200W	1200	1370x800x2000	1240x670x1460	10/48*	1	390-0083

A denotes dual temperature cycling models

* Please note that with the maximum number of shelves fitted in a cabinet, there is only a 20 mm gap between each shelf.

Cooled Incubators, Series 4, Programmable



Temperature range -10 to +50 °C, volumes 600 to 1200 l

The programmable option for LMS Series 4 cooled incubators is designed to offer the highest functionality and enables the user to set up and run complex processes relying on accurate temperature control. The programmer function is able to control

applications needing set point changes over time, e.g. ramp changes where a gradual rate of change can be set, or step changes which are instantaneous. These can be separated by soak periods during which the process is held at a constant value. Each individual time interval of the program, or segment, together with its associated moving set point value, can be stored as a unique program. Via use of “event outputs” control of interior illumination and/or alarm function is also available. At the end of a sequence, a program can be arranged to repeat (or loop), either a specified number of cycles or continuously. For safety reasons, three modes of recovery from power failure are available. These either automatically re-start the program from the beginning, continue it from where it stopped or hold it, waiting for a user re-start. Finally, chart-recorder, data-logging and configuration software for windows is available as optional extras. This software is designed to operate to program all functions of the controller and to data log the recorded process signals, including chart recorder for on screen viewing of trends, virtual instrument display, on-screen alarm displays and remote set point adjustment. For full details of incubator specifications see Series 4.

- Units feature automatic defrost
- Easy to use controls with digital display of both set point and actual temperature
- Hermetically sealed refrigeration system, and suppressed RF and TV electronics
- Full PID heating control to ensure stable internal temperature

Shelves supplied						
Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	/ max.	Pk	Cat. No.
1200 NP	1200	1370x800x2000*	1240x670x1460	10/48	1	390-0084
600 NP	600	690x800x2000*	540x670x1460	5/24	1	390-0100

* Please note that with the maximum number of shelves fitted in a cabinet, there is only a 20 mm gap between each shelf.

Optional Extras for LMS Cooled Incubators

These items must be ordered with the appropriate incubator model and cannot be 'retrofitted'.

Description	for	Pk	Cat. No.
Castors	Series 4, all models	1	390-0104
Internal socket	All models	1	390-0125
Access port 38 mm	All models	1	390-0103
Chart recorder	All models	1	390-0105

Double glazed doors

Description	for	Pk	Cat. No.
Double glazed door	Series 3, model 400	1	390-0360
Double glazed door	Series 3, model 200	1	390-0109
Double glazed door	Series 3, model 100	1	390-0110

Drosophila modification*

For application involving Drosophila, a modification for aggressive environments will be required. This factory fitted option cannot be retrofitted. Please contact us before ordering your incubator.

Description	for	Pk	Cat. No.
Drosophila modification	Series 3, model 100	1	390-0374
Drosophila modification	Series 3, model 200	1	390-0375
Drosophila modification	Series 3, model 300	1	390-0376
Drosophila modification	Series 3, model 400	1	390-0383
Drosophila modification	Series 4, model 600	1	390-0377
Drosophila modification	Series 4, model 1200	1	390-0378

Inner perspex doors

Description	for	Pk	Cat. No.
Inner perspex door	Series 3, model 100	1	390-0121
Inner perspex door	Series 3, model 200	1	390-0361
Inner perspex door	Series 3, model 300	1	390-0362
Inner perspex door	Series 4, model 600	1	390-0123
Inner perspex door	Series 4, model 1200	1	390-0124

Interior illumination

Description	for	Pk	Cat. No.
Interior illumination with 7 day timer	Series 3, model 100	1	390-0364
Interior illumination with 24 hour timer	Series 3, model 100	1	390-0363
Interior illumination with 7 day timer	Series 3, model 200	1	390-0369
Interior illumination with 24 hour timer	Series 3, model 200	1	390-0116
Interior illumination with 7 day timer	Series 3, model 300 and 400	1	390-0368
Interior illumination with 24 hour timer	Series 3, model 300 and 400	1	390-0366
Interior illumination with 7 day timer	Series 4, model 600	1	390-0365
Interior illumination with 24 hour timer	Series 4, model 600	1	390-0117
Interior illumination with 7 day timer	Series 4, model 1200	1	390-0367
Interior illumination with 24 hour timer	Series 4, model 1200	1	390-0118

Standard shelves

Description	for	Pk	Cat. No.
Standard shelf	Series 3, model 100	1	390-0370
Standard shelf	Series 3, model 200	1	390-0371
Standard shelf	Series 3, model 300	1	390-0372
Standard shelf	Series 3, model 400	1	390-0373
Standard shelf	Series 4, all models	1	390-0128

Climatic Chambers, KBF, KBF ICH and KBF LQC series



390-0230



390-0218



390-0326

Temperature range 0 to +70 °C (without humidity), volumes 115 to 700 l

The KBF series is ideal for reliable stability tests and precise maintenance of constant climatic conditions. Constant temperature and humidity values are the outstanding features of this range. These constant climate chambers have large reserve capacity and a variety of optional features. They also comply with all applicable guidelines with respect to programming and documentation requirements, such as ICH, FDA, GMP and GLP.

KBF series - for precise simulation of constant climatic conditions.

Cell Culture

Incubators

KBF ICH series - a KBF with ICH-compliant illumination, the one source solution for photostability tests.
KBF LQC series - a KBF with ICH-compliant illumination and patented light measurement, Light Quantum Control (LQC).

- Can be operated with tap water with a maximum hardness of 8.0 °dH (1.4285 mmol/l), Binder Pure Aqua Service flexible water purification system or deionised water
- Electronically controlled humidification and dehumidification system with capacitive humidity sensor
- Environmental friendly refrigerant R 134a
- Suitable for stability tests according to ICH guideline Q1A
- Electronically controlled APT.line™ preheating chamber and refrigeration system

Design: Inner glass door with smooth inner face and seals, access port with Ø 30 mm silicone plug on the left, includes 2 stainless steel racks and Binder test certificate.

Control: MCS controller with colour LCD screen with 25 storable programs each with 100 sections for max. 500 program segments. Integrated electronic chart recorder, variety of options for the graphic display of process parameters and a real time clock.

Safety: Adjustable temperature safety device Class 3.1, DIN 12880 with visual and audible alarm. Complete safety connection kit for water supply and drainage.

Humidity: Microprocessor controlled humidification and dehumidification system with a humidity range of 10-80% RH, humidity accuracy levels of ±1.5% RH.

Connections: 230 V, Ethernet or RS422 interface for communication software.

Calibration: Calibration and validation possible, please enquire.

KBF series

Inner volume				Shelves supplied /		
Type	(l)	WxDxH ext. (mm)	WxDxH int. (mm)	max.	Pk	Cat. No.
KBF 115	115	834x645x1250	600x400x480	2/5	1	390-0230
KBF 240	240	905x765x1458	650x470x785	2/9	1	390-0313
KBF 720	720	1234x865x1983	1000x600x1200	2/14	1	390-0232

KBF ICH series

Inner volume				Shelves supplied /		
Type	(l)	WxDxH ext. (mm)	WxDxH int. (mm)	max.	Pk	Cat. No.
KBF ICH 240	240	905x765x1458	650x470x785	2/7	1	390-0314
KBF ICH 720	700	1234x867x1816	1000x600x1168	2/14	1	390-0218

KBF LQC series

Inner volume				Shelves supplied /		
Type	(l)	WxDxH ext. (mm)	WxDxH int. (mm)	max.	Pk	Cat. No.
KBF LQC 240	240	905x765x1458	605x470x785	2/7	1	390-0315
KBF LQC 720	700	1234x867x1816	1000x600x1168	2/14	1	390-0326

Plant Growth Chambers, KBW Series

Binder



KBW 240 and KBW 720, temperature range 0 to 70 °C (without lighting); KBW 400, temperature range -10 to +60 °C (without lighting)

The KBW series plant growth chambers are precise units for plant cultivation under advanced working conditions. They provide perfect simulation of a wide range of growing environments. The KBW plant growth chambers satisfy all requirements for optimum lighting and temperature conditions, so that culture processes can be defined and reproduced exactly.

- Precision and outstanding dynamics
- Even distribution of light on all levels
- Environmental friendly
- Individual programming

Design: Variable position daylight cassettes with 5 daylight luminescence tubes each. Inner glass door, access port with silicone plug Ø 30 mm on the left hand side.

Shelves: Supplied with 2 stainless steel shelves.

Safety: Temperature safety device Class 3.1, with visual and acoustic temperature alarm.

Control: Microprocessor program controller with 2 programs each with 10 sections or, alternatively, switch over to 1 program with 20 sections, integrated weekly program timer, elapsed time indicator, adjustable fan speed and electronic controlled APT.line preheating chamber.

Connections: RS422 interface for APT-COM® standard communication software, nominal voltage 230 V, 200-240 V (KBW 240)

Calibrations and validations possible. Supplied with Binder test certificate.

Type	Temp. range (°C)	Volume (l)	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Pk	Cat. No.
KBW 240	0...+70	240	240	925x800x1460	650x485x785	1	390-0330
KBW 400	0...+70	400	400	884x716x1850	650x470x1308	1	390-6078
KBW 720	0...+70	720	720	1250x887x1925	973x576x1250	1	390-0359

Humidity Chambers, HCP Range

Memmert



Humidity chambers which have corrosion resistant, stainless steel inner chamber and housing for long-term climatic tests at constant temperature and humidity. Ideal for food processing, cosmetics, pharmaceutical, biotechnology, and electronics industries. Units feature an auto diagnostic system with fault indication for temperature and humidity control. The working chamber is heated on all six sides; this together with electronic humidity control prevents condensation forming in the chamber. Distilled water is supplied from an external 3 litre tank by means of a self priming pump. GLP/GMP compliance is assisted by the serial USB interface and "Celsius" software for programming and documentation.

- Multifunctional 'PERFECT' PID microprocessor controller and digital LED display for all set parameters and 7 day programme timer with real time clock
- Integrated timer for temperature profiles of up to 40 ramps, each segment adjustable from 1 min up to 999 h
- Active control for humidifying and dehumidifying (20-95% RH) with digital

display of RH, resolution 0.5%, setting accuracy 1%

- Various safety features including independent, digitally adjustable, electronic over-temperature controller TWW protection Class 3.1; audible and visual alarm in case of over or under temperature, over or under humidity, door open or empty water tank
- Inner glass door enables samples to be viewed without affecting chamber temperature and prevents contamination

Model	HCP 108	HCP 153	HCP 246
Temperature range (°C)	Ambient +8...90 with humidity control; Ambient +8...160 without humidity control		
Temperature fluctuation (°C)	±0.1	±0.1	±0.1
Temperature variation at 90 °C (°C)	< ±0.3	< ±0.3	< ±0.3
Stability RH (%)	±1.5	±1.5	±1.5
Capacity (l)	108	153	246
Heating system	Non-turbulent ventilation system		
Shelves (shelf positions)	2 (3)	2 (4)	2 (4)
Internal WxDxH (mm)	560x400x480	480x500x640	640x600x640
External WxDxH (mm)	710x550x778	630x650x938	790x750x938
Weight (kg)	70	90	110
Nominal power (W)	1000	1500	2000

Ordering Information: Units supplied with software, memory card, calibration certificate (measurements taken at 60 °C) and 2 perforated stainless steel shelves. Accessories and factory fitted options, such as USB and printer interfaces, access ports and documentation are available on request, please enquire for details.

Description	Pk	Cat. No.
HCP 108	1	466-5053
HCP 153	1	466-5054
HCP 246	1	466-5055

Cell Culture

CO₂ Incubators

CO₂ Incubators with Hot Air Sterilisation, CB Series

Binder



Temperature range ambient +7 to 60 °C, volume 53, 150 or 210 l

CO₂ incubators with advanced technology so all growth parameters are maintained in constant equilibrium with the shortest reaction times and growth processes are reproducible at any time. The CB series enable cell cultivation in the most up-to-date working conditions and reliable tissue production in compliance with all international directives and regulations. The precision and outstanding dynamics of the new screen controllers are excellent. All values are displayed in real time. The exceptionally safe decontamination concept guarantees complete sterility. The CB series is ideal for all sensitive incubation applications. Electronic self-diagnostic system for errors with optical and acoustic alarm as well as potential-free relay contact for central monitoring.

- Electronically controlled APT.line® preheating chamber technology
- MCS controller for temperature and CO₂ concentration
- Permadry™ system, condensation-free, double pan humidification system
- Contamination-free cultivation due to overnight hot air sterilisation at 180 °C. Complies with DIN 58947
- Stable pH values due to short recovery times with drift-free FPI infrared CO₂ measurement system

Design: Tightly sealing inner glass door, lockable outer door prevents unauthorised access or interference. Weldless, deep-drawn inner chamber made from stainless steel with integral shelf support system. Interior is easy to clean as it has no fan or HEPA filters. Units can be stacked on top of each other with optional stacking adapter to save space.

Shelves: 3 perforated stainless steel shelves.

Cleaning and disinfection: Hot air sterilisation at 180 °C.

Safety: Gas mixing head. A special mixing head mixes the gas, which is blown at 1 bar overpressure from the CO₂ supply via a solenoid valve into the inner chamber with filtered air, thus ensuring homogenous distribution. Electronic self-diagnostic system for errors with optical and acoustic alarm, as well as relay contact for central monitoring.

Control: Colour screen controller for temperature and CO₂ concentration, user friendly LCD screen and easy to read menu guide, integrated electronic chart recorder, real time clock and a variety of options for graphic display of process parameters. APT.line® air jacket system, Gas mixing head, infrared irradiation CO₂ measurement system, digital, drift-free infrared CO₂ measurement system with temperature safety device, Class 3.1.

Connections: RS422 interface for communication software, mains connection: 230 V, 50/60 Hz.

Technical data: Temperature deviation ±0.1 °C, rated output: 1000 W (CB 53); 1300 W (CB 150); 1500 W (CB 210).

Calibration: Calibrations and validations possible. Supplied with Binder test certificate.

Accessories: A wide range of options and accessories is available, including partitioned inner glass door and divided shelves (CB 150 and CB 210 only), O₂ control, Ethernet interface, connection kit for CO₂ / O₂ / N₂.

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Pk	Cat. No.
CB 53, CO ₂ incubator	53	580x545x720	400x330x400	1	390-0319
CB 53, CO ₂ incubator with O ₂ -control	53	580x545x720	400x330x400	1	390-0320
CB 150, CO ₂ incubator	150	680x722x919	500x500x600	1	390-6054
CB 150, CO ₂ incubator with O ₂ control	150	680x722x919	500x500x600	1	390-6056
CB 150, CO ₂ incubator with O ₂ control, with gas tight divided inner glass door and divided shelves	150	680x722x919	500x500x600	1	390-6060
CB 150, CO ₂ incubator with gas tight divided inner glass door and divided shelves	150	680x722x919	500x500x600	1	390-6058
CB 210, CO ₂ incubator	210	740x722x1069	560x500x750	1	390-6055
CB 210, CO ₂ incubator with O ₂ control	210	740x722x1069	560x500x750	1	390-6057
CB 210, CO ₂ incubator with gas tight divided inner glass door and divided shelves	210	740x722x1069	560x500x750	1	390-6059

Accessories

Description	Pk	Cat. No.
Connection Kit CO ₂	1	390-0181
Connection Kit O ₂	1	390-0182
Connection Kit N ₂	1	390-0183
Base on castors for CB 53	1	390-0321
Stacking adapter for CB 53	1	390-0322
Perforated shelf for CB 150, stainless steel	1	390-6062
Perforated shelf for CB 53, stainless steel	1	390-0316

Factory fitted options

Description	Pk	Cat. No.
Lockable keyboard for CB series incubators	1	390-0003
Rear 30 mm, silicone access port	1	390-0317
Ethernet interface for CB series incubators	1	390-0318

CO₂ Incubators, C 150 Series

Binder



Temperature range ambient +7 to 50 °C, volume 150 l

The C 150 CO₂ incubator meets the highest standards for cell cultivation. Technically uncompromising, it is ideal for routine cell culture applications. The C 150 is easily accessible, units can be used as stand alone or stacked. The microprocessor-controlled CO₂ incubators have electronically controlled APT.line™ preheating chamber technology, a fan-assisted air jacket system, a gas mixer head, and a drift-free CO₂ infrared absorption measuring system, as well as an automatic diagnostic system with optical and acoustic alarm, all as standard.

- Contamination-free cultivation due to standard-compliant hot air sterilisation at 180 °C
- 27% less potential contamination surface in the seamless, deep-drawn interior chamber
- Stable pH values due to FPI infrared measuring system without drift error
- Entirely condensation-free, even at high humidity

Design: Lockable door-with choice of left or right hand side hinges. Weldless deep-drawn inner chamber with integrated shelf support system.

Shelves: Supplied with 3 perforated stainless steel shelves.

Cleaning and disinfection: Hot air sterilisation at 180 °C complies with DIN 12880, units have an easy-to-clean interior without fan or HEPA filter.

Safety: Automatic diagnostic system with optical and acoustic alarm, as well as zero-voltage relay contact for central monitoring, locking controller keyboard via 3 digit password, temperature safety device class 3.1.

Control: Air jacket system microprocessor control for temperature and CO₂ with various alarm and status displays, built in water condensation control.

Technical data: Temperature fluctuation ±0.1 °C

Connections: 230 V, 50/60 Hz, 1.2 kW.

Calibrations and validations possible. Supplied with Binder test certificate.

Type	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Shelves supplied /		Pk	Cat. No.
				max.			
C 150, right-hinged door	150	680x832x819	500x500x600	3/6		1	390-6068
C 150, right-hinged door, stacking set of 2 incubators, with stacking adapter	2x150	680x815x1783	500x500x600	3/6		1 set	390-6070
C 150, left-hinged door	150	680x832x819	500x500x600	3/6		1	390-6069
C 150, left-hinged door, stacking set of 2 incubators, with stacking adapter	2x150	680x815x1783	500x500x600	3/6		1 set	390-6071

Cell Culture

CO₂ Incubators

CO₂ Incubators, HERAcell® i Series

Thermo Scientific



Temperature range: Ambient +3 to 55 °C, volume 150 or 240 l

CO₂ incubators which provide an ideal in-vitro environment, clean, reliable and user friendly, for the protection of valuable samples and for optimal cell growth. The HERAcell® i series CO₂ incubators provide stable, accurately monitored growth conditions offering unsurpassed protection against contamination for valuable cell and tissue cultures. Extremely short recovery times enhance cell growth. They are available in two practical sizes and two inner chamber designs, non-corrosive stainless steel or 100% antimicrobial solid copper.

- Optimum growth cultures thanks to secure and stable incubation conditions
- Outstanding permanent protection from contamination saves time and prevents

the loss of cultures

- Reliable contamination thanks to fully automatic 90 °C ContraCon decontamination routine with proven effectiveness
- Cultures protected from drying out by unique fast humidity recovery times
- All HERAcell® i incubators are available with optional O₂ control

Design: The iCAN™ (Interactive Control Access Navigator) touchscreen improves monitoring and control, gives quick access to all the important incubation parameters and provides trend analysis for convenient evaluation of the unit's performance. The control is fitted on the door to ensure it is easily accessible and clearly visible. Choice of several languages. Any changes made to the cultivation conditions are displayed directly via protocols and user recordings on the screen. Glass doors have safety interlocks, which ensure that the inner doors are not left open accidentally.

Shelves: Supplied with 3 stainless steel or solid copper shelves, 10 or 12 shelf positions depending on model.

Cleaning and disinfection: Innovative ContraCon 90 °C decontamination routine using moist heat ensures a simple and reliable cleaning process.

Safety: Solid copper interior fitting verifiably prevent the growth of bacteria and fungi by natural means. Visual alarm signals on the display.

Control: Short humidity recovery times. Units have a large, directly heated water reservoir as well as up to five times quicker humidity recovery times than conventional incubators with a water tank. Audible and visual alarms when water level is low. Optional O₂ control unit with Auto-Cal for applications that require hypoxic or hyperoxic conditions. The HERAcell® i series offers two optional O₂ control ranges.

Humidity: Constant humidity 95 ±3% RH.

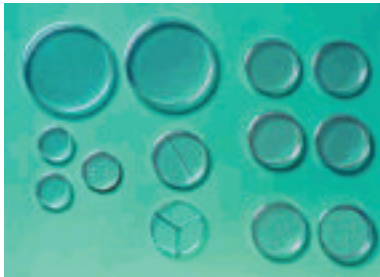
Connections: Mains connection 230 V, 50–60 Hz.

Technical data: Temperature deviation ± 0.1 °C, nominal power: 580 W (150i), 640 W (240i).

Accessories: Available with optional TC-CO₂ or IR-CO₂ sensors. For an automatic CO₂ control unit that is accurate and reliable, there is the choice between the standard thermal conductivity sensor (TC) or the dual-beam infrared sensor (IR), recommended if the temperature and humidity change frequently.

Description	Inner volume (l)	WxDxH ext. (mm)	WxDxH int. (mm)	Shelves supplied / max.	Pk	Cat. No.
HERAcell® 150i, dual chamber, stainless steel inner chamber, complete with base frame	150	637x782x867	470x530x607	3/10	1	390-4304
HERAcell® 150i, dual chamber, solid copper inner chamber, complete with base frame	150	637x782x867	470x530x607	3/10	1	390-4305
HERAcell® 150i, stainless steel inner chamber	150	637x782x867	470x530x607	3/10	1	390-4306
HERAcell® 150i, solid copper inner chamber	150	637x782x867	470x530x607	3/10	1	390-4307
HERAcell® 240i, stainless steel inner chamber	240	780x834x934	607x583x670	3/12	1	390-4308
HERAcell® 240i, solid copper inner chamber	240	780x834x934	607x583x670	3/12	1	390-4309

Petri Dishes



Transparent PS

Aseptic: manufactured under strict aseptic conditions using on line production and packaging. Sterile: irradiated with 10 kGy. Proof of sterility and batch number on the box.

- Excellent optical quality
- Stringent quality control procedures
- Compliance with automatic plate pourers

Certificates on request

Version	Height		Sterile	Pk	Cat. No.	
	Ø (mm)	(mm)				
Contact dish	65	14.5	+	720	391-1504	•
High, with one vent	90	16.2	-	700	391-1518	•
	90	16.2	+	700	391-1521	•
High, with triple vents	90	16.2	-	700	391-1517	•
	90	16.2	+	700	391-1520	•
High, without vents	90	16.2	-	700	391-1519	•
	90	16.2	+	700	391-1522	•
With triple vents	55	14.2	-	1620	391-0865	•
	55	14.2	+	1620	391-0895	•
	90	14.2	-	600	391-0875	•
	90	14.2	+	600	391-0878	•
	90	14.2	-	825	391-0891	•
	90	14.2	+	825	391-0892	•
Without vents	140	20.6	-	176	391-1500	•
	140	20.6	+	176	391-1502	•
	90	14.2	-	600	391-0877	•
	90	14.2	+	600	391-0880	•
	55	14.2	-	1620	391-0866	•
	55	14.2	+	1620	391-0868	•
With vents	90	14.2	-	825	391-0893	•
	90	14.2	+	825	391-0894	•
	140	20.6	-	176	391-1501	•
	140	20.6	+	176	391-1503	•

Petri Dishes, Star™ Dish Phoenix



For simple colony counting.

- Stackable
- Patented ribs guarantee stability during casting
- Venting system avoids condensation

Version	Height		Pk	Cat. No.	
	Ø (mm)	(mm)			
Small diameter	40	12.5	720	710-3504	
	47	12.5	750	710-3502	
Without vents	55	15	600	710-3513	•
With 4 vents	55	15	600	710-3512	
With 3 vents	85	15	600	710-3511	
Stackable, with 4 vents	90	15	600	710-3505	•
With 4 compartments	90	15	600	710-3519	•
Stackable, without vents	90	15	600	710-3506	•
Stackable, with vents	90	15	600	710-3517	
Stackable, with 4 vents	90	15	600	710-3508	
Stackable, without vents	90	15	600	710-3507	•
	90	13	600	710-3514	
With 4 vents	90	15	600	710-3515	
Without vents	90	20	384	710-3510	
	90	15	600	710-3516	
With 2 compartments	90	15	600	710-3509	•
With 3 compartments	90	15	600	710-3518	•
Large diameter	100	15	264	710-3503	

Cell Culture

Petri Dishes

Version	Height		Pk	Cat. No.	
	Ø (mm)	(mm)			
Large Diameter	140	15	120	710-3521	•
Without vents	140	15	120	710-0599	•
With 6 vents	140	20	90	710-0600	
Without vents	140	20	90	710-0601	
With 6 vents	140	25	72	710-0602	
Without vents	140	25	72	710-0603	
Contact plate	60	25	600	710-0598	

BD Falcon™ Petri Dishes, Sterile

BD Biosciences



PS

Manufactured in accordance with the current FDA Quality System.

- Products are gamma irradiated
- Flat, distortion free optics
- Stacking rings allows for easier stacking and handling
- Durable construction for stable dish manipulation



Version	Height		Pk	Cat. No.	
	Ø (mm)	(mm)			
BD Optilux™	100	20	200	391-1996	•
2 compartments	100	15	500	391-1995	
4 compartments	100	15	500	391-1999	
Tight fit lid	50	9	500	391-1997	•
Integrid, round with 20 mm moulded-in grid	150	25	100	391-2000	•
Standard	100	15	500	391-2002	•
	150	15	100	391-2003	
Easy-Grip	35	10	500	391-1998	•
Easy-Grip	60	15	500	391-2001	•
Integrid, square with 13 mm moulded-in grid	100	15	300	391-2004	•

Petri Dishes

Greiner bio-one



Made from crystal clear PS for best possible use in microscopic applications. Versions with or without vents.

- Easily stackable
- Heavy construction for good thermal resistance when working with hot agar
- With vents for better gas exchange or without vents for long incubation times

Packaging: Packaged in sets of 20/480 or 20/600 and 15/120 plates.

Version	Height		Pk	Cat. No.	
	Ø (mm)	(mm)			
With 3 vents	35	10	740	391-2072	
	60	15	560	391-2073	
With 3 vents, sterile	90	16	480	391-2077	
	90	15	480	391-2075	
With 3 vents	94	16	480	391-2076	
	100	16	420	391-2078	
Without vents	94	16	480	391-3661	
Without vents, heavy construction	94	16	480	391-3662	
With vents, heavy construction	90	20	360	391-2079	
With vents	145	20	120	391-3665	
Square (120x120) with vents	-	17	240	391-2080	

Petri Dishes



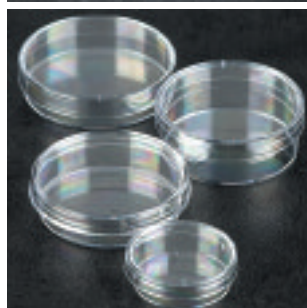
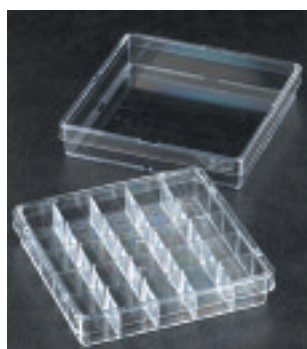
Transparent PS

Ideal for food industry or laboratories. These dishes are produced in class 100 manufacturing environment, ensuring high level of asepticity (ISO 5). Product label with batch number on each carton.

- Excellent optical quality
- Stable stacking thanks to the stacking ring
- High level of mechanical resistance and up to 55 °C

Version	Ø (mm)	Height (mm)	Pk	Cat. No.	
With triple vents	90	14.2	825	391-1505	•
With one vent	90	14.2	825	391-1506	
Without vents	90	16.2	825	391-1507	•
With one vent	90	16.2	700	391-1509	

Petri Dishes, Sterilin®



High quality single use petri dishes are moulded in a specially developed grade of crystal polystyrene and are suitable for all bacteriological applications. 90 mm dishes are manufactured and packed in aseptic conditions. The range includes 50 mm and 60 mm dishes, ideal for use in vacuum tests using membrane filters for microbiological analysis of liquids; large dishes for antibiotic assays and sensitivity testing; compartmented dishes for culturing on two or three different media using the same plate. The Repli dish has 25 compartments each measuring 1.8 cm square (capacity 5 ml) and has many applications. The 55 mm Contact plate is used for surface sampling in the food industry, hospitals and other areas where contamination levels are of importance. It has a surface area of 24 sq cm and there is a numbered grid on the base to facilitate colony counting. These plates should be poured on a cold surface to enhance the meniscus.



- Suitable for use with automatic plate pouring machines
- Aseptically manufactured under clean room conditions (class 7 ISO14644) to exclude microbiological contamination
- Ideal for use with different media or when savings in media / incubator space are required (with compartments)

Version	Height		Pk	Cat. No.	
	Ø (mm)	(mm)			
Triple vent	35	11	800	391-2019	
Deep, single vent	50	20.3	500	391-2022	•
Shallow, single vent	52	14.5	700	391-2020	•
No vent	55.5	12	1620	391-2041	
Triple vent	55.5	12	1620	391-2042	
Single vent	60	15.1	540	391-2021	
Contact plate	67	10.5	300	391-2031	
Single vent	89.2	16	500	391-2015	•
Triple vent	89.2	16.2	500	391-2016	•
Triple vent, 2 compartments	89.2	16.2		391-2029	
Triple vent, 3 compartments	89.2	16.2	500	391-2030	
Square, 100x100 mm	101.6	21.1	120	391-2018	•
Square, 100x100 mm, Repli dish with 25 compartments	101.6	20.8	120	391-2017	•
Triple vent	138.9	21.1	80	391-2028	•

The quick and easy way to request a quote!

Just e-mail quote_me@uk.vwr.com

Cell Culture

Petri Dishes

Petri and Contact Dishes

Nunc™



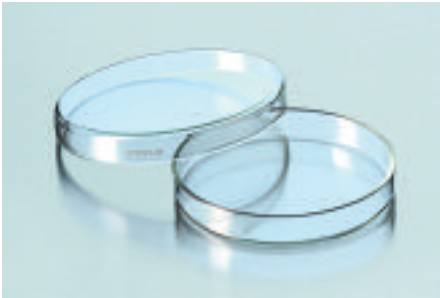
Optically clear polystyrene

Contact dish with printed grid, useful for sampling in hospital environments as well as in food science and the pharmaceutical industry.

- Ideal for automated systems
- Radiation sterilised

Version	Height		Sterile	Pk	Cat. No.	
	Ø (mm)	(mm)				
Contact dish for 35 ml	145	21	-	180	710-2510	•
Contact dishes with grid for 7.7 ml	67	15	+	396	710-2507	•
Petri dish vented for 12.5 ml	100	15	-	320	391-8020	•

Petri Dishes, Steriplan®
DURAN Group



Soda-lime-glass

- Bottom dish and lid inside and outside microscopic flat, free of bubbles and other imperfections

Version	Ø (mm)	Height (mm)	Pk	Cat. No.	
Petri dish	40	12	1	391-2805	•
	60	15	1	391-2810	•
	80	15	1	391-2820	•
	100	10	1	391-2831	•
	100	15	1	391-2830	•
	100	20	1	391-2840	•
	120	20	1	391-2850	•
	150	25	1	391-2860	•
	180	30	1	391-2870	•
	200	30	1	391-2880	•
	200	45	1	391-2890	•

Petri Dishes

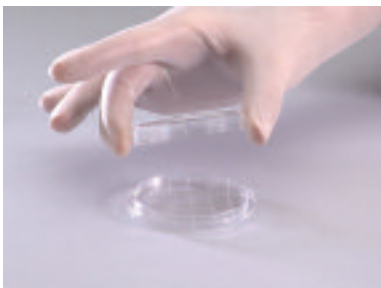


CrystalPS plates specially adapted to the needs of all users. All plates are manufactured under aseptic conditions according to the cleanroom technology.

- Perfect flatness to ensure the agar's homogeneity
- Stable stacking
- Retains shape up to 55 °C, high level of mechanical resistance
- Compatible with the most industrial automatic agar-pouring machines

Version	Height		Sterile	Pk	Cat. No.	
	Ø (mm)	(mm)				
With 3 vents	100	14	+	500	391-2056	•
	100	14	-	500	391-2057	•
With 1 vent	90	14.2	+	825	216-0509	•

Contact Plate



This plate is used in the pharmaceutical or food-processing industry and also in hospital environments for surfaces such as skin, operating tables and work surfaces.

- The moulded grid at the bottom makes it possible to identify contamination per cm2
- The unique closing system grid lid ensures safety during transport
- The domed base guarantees a saving in agar while maintaining the surface sampling
- Stable stacking

Version	Ø (mm)	Height (mm)	Pk	Cat. No.	
With 3 vents	65	14.5	720	391-2064	•

Petri Dishes, Duroplan®

DURAN Group



Borosilicate glass

This plate is used in the pharmaceutical or food-processing industry and also in hospital environments for surfaces such as skin, operating tables and work surfaces.

- Allow even distribution of culture media
- Distortion-free transparency
- Resistant against temperature and chemicals



Version	Ø (mm)	Height (mm)	Pk	Cat. No.	
Duroplan®	54.5	20	1	391-0810	•
	74	20	1	391-0820	•
	94	15	1	391-0830	•
	94	20	1	391-0840	•
	114	20	1	391-0850	•
	143	26.5	1	391-0860	•

Petri dishes



Soda-lime glass

- Bottom and lid flat inside and out
- A cost-effective alternative

Version	Ø (mm)	Height (mm)	Pk	Cat. No.	
	60	15	1	391-2710	•
	80	15	1	391-2720	•
	100	15	1	391-2730	•
	100	20	1	391-2740	•
	120	20	1	391-2750	•
	150	25	1	391-2760	•
	180	30	1	391-2770	•
	200	30	1	391-2780	•

Petri Dish



Flint glass.

- Can be autoclaved at a temperature of 120 °C



Version	Ø (mm)	Height (mm)	Pk	Cat. No.	
Petri dish, flint glass	100	15	18	391-2256	•

Petri Dishes



Pyrex borosilicate glass. Complete with lid.

- Chemically resistant
- Specially formed to ensure even wall thickness and consistent optical performance
- Will withstand repeated autoclaving

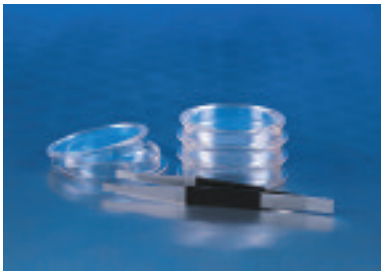


Version	Ø (mm)	Height (mm)	Pk	Cat. No.	
Petri dish, glass	60	20	10	391-2023	•
	80	20	10	391-2024	•
	100	20	10	391-2025	•
	120	20	10	391-2026	•
	150	20	10	391-2027	•

Cell Culture

Petri Dishes

Petri Dishes with Absorbent Pads



PS, absorbent pads cellulose

Ideal for microbiological analysis when performing the Membrane Filter (MF) Technique. Filter size accepts 47 mm membrane filter.

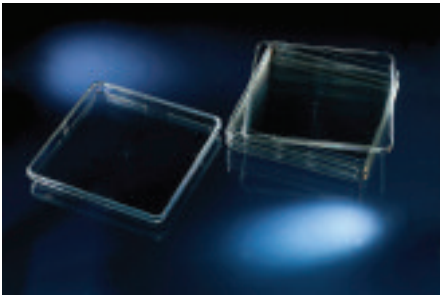


- Gamma irradiated for sterilisation, no dangerous EtO residuals
- Easy to use, opens easily with one hand, yet closes to a tight seal
- Uses less space on the lab bench or in the incubator with easy stacking base

Version	Ø		Height		Pk	Cat. No.	
	(mm)	(mm)					
Polystyrol	47	9	+		100	516-8020	•
Petridish w/o absorbent pads	50	9	+		500	516-8021	•
Petridish w/o absorbent pads	50	9	+		100	516-8029	•
Petri dishes, with absorbent pads	50	9			100	516-8032	•

Bioassay Dishes

Nunc™



PS, sterile, with lid

Useful for screening large numbers of colonies in cloning experiments. Low profile dishes designed for genomic screening and colony picking.



- Can be used for culturing bacteria and fungi; also suitable in agar diffusion assays
- Can be used as a moisture chamber for incubation of MicroWell™ plates
- Lined with wet filter paper can also be used as an incubation chamber for in situ hybridisation
- Large growth area
- Low profile dish fits robotic instruments

Recommended working volume				
Description	(ml)	WxDxH ext. (mm)	Pk	Cat. No.
Bioassay dishes, 500 cm² surface area	225	245x245x25	16	734-2179

Absorbent Pad Kits



One-handed dispensing of cellulose absorbent pads 45,5 mm Ø

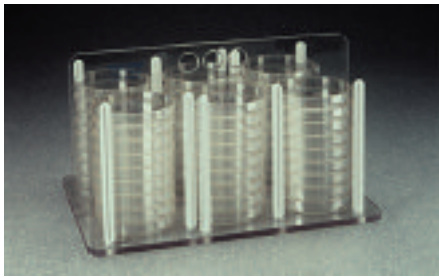
Absorbent pads are ideal for absorbing broth media to culture colonies in accordance with the Membrane Filter (MF) Technique.

Enables user to dispense a clean cellulose pad into a Petri dish whenever needed without touching the pad. Handy dispenser kit holds one tube of one hundred absorbent pads (ten tubes included).

Description	Pk	Cat. No.	
Sterile	1000	516-9012	•
Non-sterile	1000	516-7850	•

Petri Dish Racks

Nalgene



PC frame, white PC posts

For up to 72 plastic round dishes (60x15 mm). Simple assembly required.

- Smooth, rounded corners
- Finger-grip handle and rubber feet make carrying safe and secure
- Petri Dish Rack can be decontaminated by heat sterilization

WxDxH: 203x298x152 mm



Pk	Cat. No.
1	710-4106

Petri Dish Racks

Nalgene



Acrylic frame, white PC posts

For up to 54 plastic round dishes (100x15 mm) or 42 glass round dishes (100x15 mm). Simple assembly required.

- Smooth, rounded corners
- Finger-grip handle and rubber feet make carrying safe and secure
- Petri Dish Rack can be decontaminated by heat sterilization

WxDxH: 203x343x235 mm



Pk	Cat. No.
1	391-2161

Petri Dish Dispensers

Heathrow Scientific



Acrylic

This sturdy dispenser will hold up to 20 Ø 90 mm Petri dishes in two easy-to-access partitions.

- Place on the counter or mount on a wall
- Solid and clear
- Mounting screws included

WxDxH: 203x102x229 mm

Pk	Cat. No.
1	391-1165

Petri Dish Carrying Rack, Poxygrid®



Not suitable for glass Petri dishes

- Easily loaded and emptied from the top
- Epoxy coated steel wire rack
- For plastic Petri dishes Ø 90 and 100 mm

WxDxH: 108x108x356 mm (1 stack, for 20 dishes)

WxDxH: 343x105x305 mm (3 stacks, for 42 dishes)

Description	Pk	Cat. No.
1 Stack	1	391-2011
3 Stacks	1	391-2013

Cell Culture

Innoculating Needles and Accessories

Inoculating Loops in Resealable Bags



The resealable bags can be easily opened with one hand. The loops and needles are placed upside down in the bag in order to guarantee purity as long as possible. The loops are colour coded and rigid or flexible versions are available. Optional holder for bags is available.

- Gamma sterilised
- Packaged in resealable bags
- The handle has a hexagonal shape for easy and secure handling

Packaging: 40 loops in a bag (25 bags per pack)

Delivery Information: Delivered with a certification of calibration in each box.

Description	Capacity (µl)	Colour	Packed	Pk	Cat. No.	
Loops, rigid	1	dark green	40	1000	612-9360	•
	10	dark blue	40	1000	612-9359	•
Loops, flexible	1	light green	40	1000	612-9361	•
	10	light blue	40	1000	612-9362	•
Loops, Ø 1.45 mm, long. 20 cm	-	violet	40	1000	612-9366	•

Accessories

Description	Capacity (µl)	Colour	Packed	Pk	Cat. No.	
Holder for resealable packs	-	transparent	-	1	612-9365	•

Inoculating Loops and Needles in Dispenser Tubes



Calibrated disposable inoculating loops made from flexible or rigid plastic to cater to different applications and preferences of microbiologists.

- Colour-coded for easy product identification
- Conveniently packaged in anti-roll tubes with push-on resealable cap
- Fast, easy and secure access to the loops, without the need for a separate holder
- Loops have an ultra smooth surface for easy streaking and length of 210 mm

Delivery Information: Calibration certificate supplied with every pack.

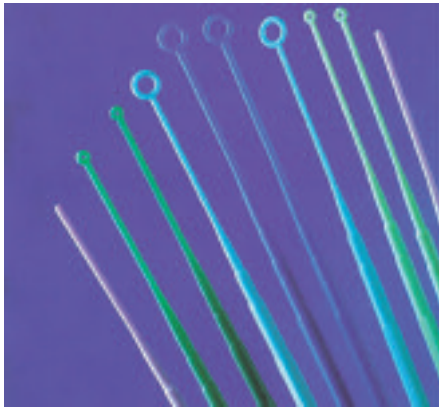
Description	Capacity (µl)	Colour	Packed	Pk	Cat. No.	
Inoculating loops, rigid	1	dark green	50	1000	612-2494	•
Inoculating loops, flexible	1	light green	50	1000	612-2497	•
Inoculating loops, rigid	10	dark blue	50	1000	612-2496	•
Inoculating loops, flexible	10	light blue	50	1000	612-2498	•
Inoculating needles, Ø 1.45 mm	-	violet	50	1000	612-2495	•



Dehydrated or ready-to-use media?
All you need!

See 'Microbiology' section Chapter 7

Inoculating Loops



These loops ensure consistent wetting and complete liquid transfer. Available rigid or flexible, the loops have round edges for gentle treatment of the agar.

- Gamma sterilised
- Colour coded
- Hexagonal shaft for easy handling

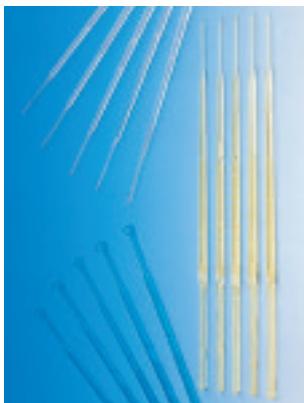
Delivery Information: Delivered with a certification of calibration in each box.



Description	Capacity (µl)	Colour	Packed	Pk	Cat. No.	
Loops, rigid	1	dark green	bags of 10	500	612-9351	•
	1	dark green	bags of 20	1000	612-9352	•
	10	dark blue	bags of 10	500	612-9353	•
	10	dark blue	bags of 20	1000	612-9354	•
Loops, flexible	1	light green	bags of 10	500	612-9355	•
	1	light green	bags of 20	1000	612-9356	•
	10	light blue	bags of 10	500	612-9357	•
	10	light blue	bags of 20	1000	612-9358	•

Inoculating Needles and Loops

Nunc™



PS, sterile

Disposable, problem-free inoculation with smooth loop surface.

- Meet semi-quantitative standard for handling samples
- Surface treated for enhanced droplet adhesion
- Non-toxic



Description	Capacity (µl)	Colour	Packed	Pk	Cat. No.	
Loops	1	transparent	12	2400	710-2508	•
	1	transparent	50	4000	734-2138	•
	10	blue	12	2400	710-2509	•
	10	blue	50	4000	734-2137	•
Needles	-	yellow	12	2400	734-2140	•
	-	yellow	50	4000	734-2139	•

Inoculating Loops, Microstreaker



Inoculation loop of nickel-chromium wire of not more than 60 mm length, conforming to Howie recommendations.

- Colour coded handle

Description	Capacity (µl)	Pk	Cat. No.	
Large, 5.05 mm ID, red handle	10	5	300-0501	•
Medium, 2.91 mm ID, green handle	3	5	300-0502	•
Small, 2.26 mm ID, blue handle	2	5	300-0503	•

Cell Culture

Inoculating Needles and Accessories

Inoculating Loops, Disposable, Microloops



Sterile, disposable inoculating loops.

- Colour coded plastic
- Moderately flexible



Description	Capacity (µl)	Pk	Cat. No.	
Loop	10	1000	300-0510	•
	1	1000	300-0512	
Loop peel pouch	10	1000	300-0500	•
	1	1000	300-0511	

Inoculating Loops



These NiCr 8020 loops are available in a range of sizes and lengths with internal diameters (Ø) of 1.5, 2.5 or 4 mm. They are heat resistant and can be flamed to sterilise the loop. Diameter of wire: 0.6 mm.

631-7131

Description	Pk	Cat. No.	
Loops, 50 mm, Ø 1.5 mm	10	631-7131	•
Loops, 50 mm, Ø 2.5 mm	10	631-7132	•
Loops, 50 mm, Ø 4.0 mm	10	631-7133	•
Loops, 75 mm, Ø 1.5 mm	10	631-0084	•
Loops, 75 mm, Ø 2.5 mm	10	631-0085	•
Loops, 75 mm, Ø 4.0 mm	10	631-0086	•



Holders for Needles and Loops
With black plastic handle.

631-0620

Description	Pk	Cat. No.	
Holder, length 170 mm	5	631-0620	•
Holder, length 240 mm	5	631-0621	•

Inoculating Needles



Plastic, single use, sterile
Packaging: Peelable sachets.



Description	Ø (mm)	Length (mm)	Colour	Pk	Cat. No.	
Mini inoculation needles	1.15	150	blue	500	612-2654	•
Inoculation needles	1.45	200	violet	1000	612-2655	•



Maximum food safety with
Merck foodproof® real-time PCR kits

See 'Microbiology' section Chapter 7

Inoculating Needles



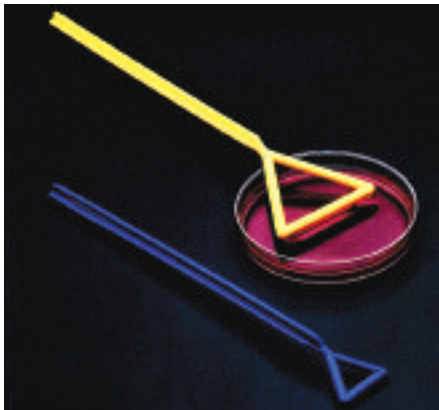
Sterile disposable plastic.

- Moderately flexible
- Colour coded plastic



Description	Colour	Packed	Pk	Cat. No.
Needle	green	peel pouch	1000	632-0056
	green	20/bag	1000	632-0057

Spreaders



Convenient and economical, these cell spreaders are designed to simplify bacterial culture work.

- Durable enough to be autoclaved and used again



Description	Colour	Packed	Pk	Cat. No.
Sterile	blue	Individually wrapped	25	612-2688
	yellow	Individually wrapped	25	612-2690
Non sterile	blue	Bulk	25	612-2687
	yellow	Bulk	25	612-2689

Spreaders, L-shaped



The foot of the spreader has a completely smooth, rounded surface, free of rough edges and imperfections. It enables even spreading of liquid samples across the surface of agar plates without gouging or cutting the medium.

- Surface treated to enhance adhesion of droplets
- Non-toxic
- Gamma irradiated

Dimensions: 135x35 mm



Description	Colour	Packed	Pk	Cat. No.
Spreaders, L-shaped	blue	individually packed	500	612-1560
	blue	bag of 5	1000	612-1561

Cell Culture

Innoculating Needles and Accessories

Spreaders, T-shaped



Plastic, sterile

Designed for spreading and dispersing liquids across the surface of agar culture plates. Used for performing bacterial (CFU plate counts) on water, milk and other liquid samples.

- Smooth rounded surfaces to prevent cutting or gouging of agar
- T-Shaped to ensure even pressure is applied while spreading



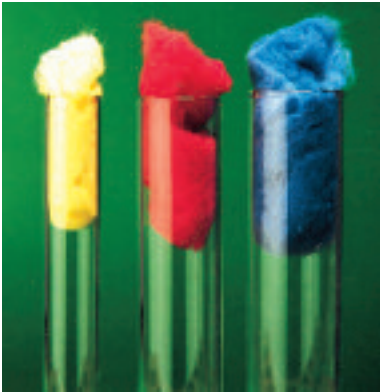
Description	Colour	Packed	Pk	Cat. No.	
T-Shaped spreader	blue	1/peel pouch	500	612-2651	•
	blue	5/peel pouch	1000	612-2652	•
	blue	10/peel pouch	1000	612-2653	•

Cotton Wool

- Absorbent

Description	Pk	Cat. No.	
Cotton wool, hospital quality	1 Roll	118-0300	•
Cotton wool, BPC (British Pharmacy Code)	500 g	118-0301	•

Cotton Wool



- Available in choice of colours
- Non-absorbent

Description	Pk	Cat. No.	
Cotton wool, yellow	500 g	391-2263	
Cotton wool, white	500 g	391-2264	•

BugStopper™
Whatman



For bacterial, viral and cell cultures. BugStopper™ is a unique reusable cap that provides reliable sterile ventilation for culture containers. The cap is made of biologically inert silicone. The ventilation device consists of an ultra-fine glass microfibre filter, which is reinforced with a coating of polyester monofilament. The ventilation device is surrounded by a reinforcement ring made of stainless steel.



- For preserving sample integrity even during use, autoclavable
- The BugStopper™ can be punctured with a needle for sample collection or infusions even while it is in use
- Cost-efficient, can be used repeatedly
- Available in 2 sizes to fit a variety of culture flasks

Description	for Ø (mm)	Pk	Cat. No.	
BugStopper™	28	10	516-1720	
	28	100	516-1721	
BugStopper™ 10	37	10	516-1722	
	37	50	391-0148	

LABOCAP Caps



Aluminium

Without handle. Cap for sterile but not hermetic closing of test tubes

- Made of aluminum anodized with inner stainless steel spring
- Springs clamp against the outer wall of the vessel
- For sterile, non-hermetic sealing of vessels
- Anodised and coloured
- Autoclavable

Description	for Ø (mm)	Pk	Cat. No.	
LABOCAP, silver	12/13	10	391-5901	•
	15/16	10	391-5907	•
	17/18	10	391-5910	•
	19/20	10	391-5913	•
LABOCAP, blue	12/13	10	391-5902	
	17/18	10	391-5911	•
	12/13	10	391-5903	•
LABOCAP, red	14/15	10	391-5906	
	17/18	10	391-5912	•



LABOCAP Caps



Aluminium

With handle. Cap for sterile but not hermetic closing of test tubes.

- Made of aluminum anodized with inner stainless steel spring
- Springs clamp against the outer wall of the vessel
- For sterile, non-hermetic sealing of vessels
- Anodised and coloured
- Autoclavable

Description	for Ø (mm)	Pk	Cat. No.	
LABOCAP, silver	12/13	10	391-5921	
	14/15	10	391-5924	
	15/16	10	391-0094	•
	17/18	10	391-5930	
LABOCAP, blue	19/20	10	391-5933	
	17/18	10	391-5931	•
LABOCAP, red	17/18	10	391-5932	



Erlenmeyer Caps



Aluminium

- Anodised and blue coloured
- Springs made of chromium-nickel steel
- Springs clamp against the outer wall of the vessel
- Autoclavable

Description	for Ø (mm)	Pk	Cat. No.	
Caps, aluminium	37/39	10	391-0951	•



Cell Culture

Cell Culture - Flasks

BD Falcon™ Cell Culture Flasks

BD Biosciences



PS, tissue culture-treated, sterile, non-pyrogenic

Vacuum-gas plasma tissue culture treatment ensures consistent cell attachment, spreading and growth.

- Easy-to-read printed volumetric graduations, and writing patch
- Vented caps incorporate a 0.2 µm hydrophobic membrane
- Phenolic caps contain non-toxic liners
- Convenient, peel-open, medical-style packaging ensures flask sterility is maintained



Growth area (cm²)	Capacity (ml)	Neck	Cap	Pk	Cat. No.	
12.5	25	canted	plug-seal	100	734-0010	•
	25	canted	vented	100	734-0043	•
	50	canted	plug-seal	200	734-0009	•
25	50	canted	vented	100	734-0044	•
	70	canted	plug-seal	200	734-0031	•
	70	canted	vented	100	734-0045	•
	70	canted	phenolic	200	734-0030	•
	250	straight	plug-seal	100	734-0012	•
75	250	straight	vented	100	734-0046	•
	250	straight	phenolic	100	734-0011	•
	250	canted	plug-seal	60	734-0049	•
	250	canted	vented	60	734-0050	•
	250	canted	phenolic	60	734-0388	•
150	600	canted	plug-seal	40	734-0266	•
	600	canted	vented	40	734-0267	•
	750	straight	plug-seal	40	734-0014	•
175	750	straight	vented	40	734-0047	•
	750	straight	phenolic	40	734-0018	•
175*	750	straight	vented	40	734-0964	•
225	800	canted	plug-seal	30	734-1031	•
	800	canted	vented	30	734-0957	•
300	1900	straight	plug-seal	12	734-0039	•
	1900	straight	vented	12	734-0048	•

* Bar-coded (robotics/automation compatible)
Note: culture area and capacity are nominal

Cell Culture Flasks, Nunclon™Δ

Nunc™



PS, sterile

Cell culture flasks with surface areas from 25 to 500 cm², with filter or vent/close caps and straight or angled neck.

- Standard flasks have short, wide necks for easy access
- SoLo Flasks, for standing cultures, have a low profile design, which saves incubator space (four stacked SoLo Flasks occupy the same space as three conventional flasks), and have a large bore angled neck, which facilitates pipette and cell scraper access
- TripleFlasks have the same external dimensions as a standard 175 cm² flask, but have three parallel growth surfaces providing a total culture area of 500 cm², making them ideal for scale-up
- Excellent optical quality and individually leak-tested
- Nunclon™Δ certified surface treatment for optimal cell growth and attachment



Standard flasks

Growth area (cm²)	Recommended working volume (ml)	Neck	Cap	Pk	Cat. No.	
25	7	angled	filter	160	734-2004	•
		angled	vent/close	160	734-2081	•
80	30	straight	filter	50	734-2131	•
		straight	vent/close	50	734-2046	•
175	68	straight	filter	32	734-2129	•
		straight	vent/close	32	734-2067	•

SoLo flasks

Growth area (cm²)	Recommended working volume (ml)	Neck	Cap	Pk	Cat. No.	
185	75	angled	vent/close	50	734-2034	
		angled	filter	50	734-2035	•

Triple flasks

Growth area (cm²)	Recommended working volume (ml)	Neck	Cap	Pk	Cat. No.	
500	200	straight	vent/close	32	734-2000	•
		straight	filter	32	734-2001	•

Caps for Nunclon™Δ flasks



HDPE, sterile

Description	Pk	Cat. No.
Filter caps for 25 cm² flasks	100	734-2159
Filter caps for 175/185/500 cm² flasks	100	734-2153
Vent/close caps for 175/185/500 cm² flasks	100	734-2152

Cell Culture Flasks, EasYFlasks™, Nunclon™Δ

Nunc™



PS, sterile

Designed to allow full access to the growth surface.

- Flask is opened or closed with 1/3 turn of the cap
- “Y” Mark caps allow visual verification of vent position, even when stacked in incubators
- Volume graduations on both sides of the flask
- Angled neck facilitates easy access
- Nunclon™Δ certified surface treatment for optimal cell growth and attachment



Growth area (cm²)	Recommended working volume (ml)	Neck	Cap	Pk	Cat. No.	
25	7	angled	vent/close	200	734-2063	•
		angled	filter	200	734-2064	•
75	30	angled	vent/close	100	734-2065	•
		angled	filter	100	734-2066	•
175	55	angled	vent/close	30	734-2168	•
		angled	filter	30	734-2167	•

Sampling and Cell Culture

Cell Culture

Cell Culture - Flasks

Caps for EasyFlasks™



HDPE, sterile

Description	Pk	Cat. No.
Vent/close caps for 25 cm² flasks	100	734-2166
Filter caps for 25 cm² flasks	100	734-2165
Vent/close caps for 75 cm² flasks	100	734-2164
Filter caps for 75 cm² flasks	100	734-2163
Vent/close caps for 175 cm² flasks	100	734-2144
Filter caps for 175 cm² flasks	100	734-2145

Cell Culture Flasks, Non-Treated

Nunc™



PS flask, HDPE filter cap, sterile, non-pyrogenic

For culturing cells that do not require a treated surface. Ideal for hybridoma and suspension cultures.

- Canted neck flask for better accessibility
- Distinctive white cap for easy identification
- Extra caps provided in each carton



Capacity (ml)	Recommended working volume (ml)	Pk	Cat. No.
70	7	200	734-2104
260	30	100	734-2069
645	55	30	734-1190

VWR Collection

The solution to your everyday needs

Please contact your local VWR sales office or go to www.vwr.com for the latest news and special offers

Cell Culture Flasks

Corning



734-1532



734-1713



734-0093



Optically clear PS

Available with a choice of treated surface. Corning® CellBIND® Surface increases surface wettability for more even and consistent cell attachment. Ultra-Low Attachment flasks feature a covalently bound hydrogel layer that minimises cell attachment, protein absorption and cellular activation.

- Treated for optimal cell attachment
- Printed with lot numbers for ease in traceability
- Sterilised by gamma radiation
- Certified non pyrogenic

25 cm² growth area flasks

Description	Neck	Cap	Pk	Cat. No.
Rectangular, TC treated	canted	plug-seal	500	734-1700
Rectangular, TC treated	canted	phenolic	500	734-1706
Rectangular, TC treated	canted	vented	200	734-1712
Triangular, TC treated	angled	phenolic	500	734-1531
Triangular, TC treated	angled	vented	200	734-1532
Rectangular, CellBIND® surface	canted	vented	200	734-0090
Rectangular, Ultra-Low Attachment	canted	vented	24	734-4140

75 cm² growth area flasks

Description	Neck	Cap	Pk	Cat. No.
Rectangular, TC treated	canted	plug-seal	100	734-1715
Rectangular, TC treated	canted	phenolic	100	734-1716
Rectangular, TC treated	canted	vented	100	734-1713
Modified triangular	straight	phenolic	100	734-1543
Modified triangular	straight	vented	100	734-1544
Rectangular, CellBIND® surface	canted	vented	100	734-0091
Rectangular, Ultra-Low Attachment	canted	vented	24	734-4139

92.6 cm² growth area RoboFlask™ vessels

Description	Cap	Pk	Cat. No.
Cell culture vessel for manual use, TC treated, with bar code	septum	100	734-4045
Cell culture vessel for manual use, TC treated, with bar code	septum	50	734-4044
Cell culture vessel for manual use, TC treated, with bar code	flat (without septum)	100	734-4046
Cell culture vessel for manual use, TC treated, with bar code	flat (without septum)	50	734-4041
Cell culture vessel for automation, CellBIND® surface, with bar code	septum	100	734-4042
Cell culture vessel for automation, CellBIND® surface, with bar code	septum	50	734-4043

100 cm² growth area low profile flasks

Description	Cap	Pk	Cat. No.
Low profile, CellBIND® surface	vented	60	734-4047
Low profile, TC treated	vented	60	734-4141

Cell Culture

Cell Culture - Flasks

150 cm² growth area flasks

Description	Neck	Cap	Pk	Cat. No.
Rectangular, TC treated	canted	plug-seal	50	734-1717
Rectangular, TC treated	canted	phenolic	50	734-1718
Rectangular, TC treated	canted	vented	50	734-1719
Rectangular, CellBIND® surface	canted	vented	50	734-0092

162 cm² growth area flasks

Description	Neck	Cap	Pk	Cat. No.
Traditional, TC treated	straight	phenolic	25	734-1540
Traditional, TC treated	straight	phenolic	25	734-1541

175 cm² growth area flasks

Description	Neck	Cap	Pk	Cat. No.
Rectangular, TC treated	angled	plug-seal	50	734-1722
Rectangular, TC treated	angled	vented	50	734-1723
Rectangular, TC treated	angled	phenolic	50	734-1726
Rectangular, TC treated, with bar code	angled	vented	84	734-1733
Rectangular, CellBIND® surface, with bar code	angled	vented	84	734-1214
Rectangular, CellBIND® surface	angled	vented	50	734-0093
Rectangular, CellBIND® surface	angled	phenolic	50	734-1206

225 cm² growth area flasks

Description	Neck	Cap	Pk	Cat. No.
Traditional, TC treated	angled	plug-seal	25	734-1724
Traditional, TC treated	angled	vented	25	734-1725
Rectangular, TC treated	canted	phenolic	24	734-1519
Rectangular, TC treated	canted	vented	24	734-1520
Traditional, CellBIND® surface	angled	vented	25	734-0094

235 cm² growth area flasks

Description	Neck	Cap	Pk	Cat. No.
Rectangular, CellBIND® surface, with bar code	angled	vented	42	734-4192

1720 cm² growth area HYPERFlask™ vessels

Description	Pk	Cat. No.
HYPERFlask with CellBIND® surface, bar coded	4	734-4009
HYPERFlask with CellBIND® surface, bar coded	24	734-4010

BD Primaria™ Cell Culture Flasks

BD Biosciences



PS, tissue culture-treated, sterile, non-pyrogenic

The complex surface on BD Primaria™ products is homogeneous and stable and is used to improve attachment and differentiation of a variety of cell types. The surface chemistry of BD Primaria™ products is confirmed by Electron Scanning for Chemical Analysis (ESCA).

- Unique, nitrogen-containing tissue culture surface chemistry improves attachment, spreading and growth for many primary cells or cell lines
- Vented caps incorporate a 0.2 µm hydrophobic membrane
- Optically clear and no special storage required
- Convenient, peel-open, medical-style packaging

Growth area (cm²)	Capacity (ml)	Neck	Cap	Pk	Cat. No.
25	50	canted	vented	100	734-0073
		canted	plug-seal	200	734-0075
75	250	straight	vented	100	734-0074
		straight	plug-seal	100	734-0076

* Note: culture area and capacity are nominal

BD BioCoat™ Collagen I Cell Culture Flasks

BD Biosciences



PS coated with rat tail collagen type I, sterile, non-pyrogenic

The uniform application of collagen type I to the surface of tissue culture vessels has been found to improve cell attachment and increase proliferation rates for a variety of normal or transformed mammalian cell types.



Growth area (cm ²)	Capacity (ml)	Neck	Cap	Pk	Cat. No.
25	70	canted	vented cap	10	734-0158
		canted	vented cap	50	734-0289
		canted	plug-seal	10	734-0187
		canted	plug-seal	50	734-0309
75	250	canted	vented cap	5	734-0159
		canted	vented cap	50	734-0290
		canted	plug-seal	5	734-0147
		canted	plug-seal	50	734-0283
150	600	straight	vented cap	40	734-0291
		straight	plug-seal	40	734-0318
		straight	vented cap	40	734-0292
175	750	straight	plug-seal	5	734-0155
		straight	plug-seal	40	734-0287
		straight	vented cap	5	734-0161

* Note: Growth area and capacity are nominal

BD BioCoat™ Gelatin Cell Culture Flasks

BD Biosciences



PS, coated with porcine gelatin, sterile, non-pyrogenic

BD BioCoat™ Gelatin provides an attachment and growth promoting substrate for the culture of a variety of cell types. Gelatin is commonly used in the culture of normal and transfected cell types, including vascular endothelial, muscle, embryonic stem (ES) and F9 teratocarcinoma cells. Gelatin is a heterogeneous mixture of water soluble proteins derived through the hydrolysis of collagen. Applications include promotion of cell attachment and spreading of vascular endothelial cells (for instance, BME, BAEC, ES cells), C2C12 myoblasts and MM14 myoblasts; culture of normal and transfected F9 teratocarcinoma cells for gene expression studies; and culture of HUVEC for E-Selectin expression and VEGF induction.



- Gelatin substrate enhances the attachment of a variety of normal and transfected cell types
- Pre-treatment with gelatin eliminates time consuming preparation, saving time and money
- Lot-to-lot consistency ensures reproducible results

Growth area (cm ²)	Capacity (ml)	Neck	Cap	Pk	Cat. No.
75	250	canted	vented	5	734-0162
		canted	vented	50	734-0293
		canted	plug seal	5	734-0253
		canted	plug seal	50	734-0324

* Note: culture area and capacity are nominal

Cell Culture

Cell Culture - Flasks

BD BioCoat™ Poly-D-Lysine Cell Culture Flasks

BD Biosciences



PS, coated with Poly-D-Lysine, sterile, non-pyrogenic

Poly-D-Lysine (PDL) is a synthetic compound that enhances cell adhesion and protein absorption by altering surface charges on the culture substrate. Poly-Lysine surface treatments support applications including attachment and spreading of a variety of cell lines; cell differentiation and neurite outgrowth; attachment of transfected cell lines; and survival of primary neurons in culture. As PDL is a synthetic molecule, it does not stimulate biological activity in the cells cultured on it, and it does not introduce impurities carried by natural polymers.



Growth area (cm²)	Capacity (ml)	Neck	Cap	Pk	Cat. No.	
25	70	canted	vented	50	734-0311	
		canted	plug seal	50	734-0288	
75	250	canted	vented	50	734-0418	
		canted	plug seal	50	734-0306	
150	600	straight	vented	40	734-0312	
		straight	plug seal	40	734-0294	
175	750	straight	vented	40	734-0419	•
		straight	plug seal	40	734-0308	

* Note: culture area and capacity are nominal

Cell Culture System, OptiCell™

Nunc™



OptiCell™ is a cell culture system for growing, monitoring and transporting cells. It consists of two parallel gas-permeable, cell culture treated PS membranes attached to a standard microtitre plate sized frame. Each side has a growth area of 50 cm2, total 100 cm2, with 75 µm thick membranes, 2 mm apart. Applications include transportation of live cells, hybridoma antibody production (OptiCell MAX), short-term freezing and thawing of cells, biomagnetic cell separation (OptiMag), cell imaging and staining, and transfection.

- Thin profile design maximises incubator space and reduces medium consumption (recommended medium/cell fill volume 10 ml for OptiCell and 30 ml for OptiCell MAX)
- Two resealing access ports provide closed growth environment with sterile fluid path, thereby reducing risk of contamination
- Barcoded for easy tracking and automatic handling

OptiCell™ is a registered trademark of BioCrystal, LTD

OptiCell™ kits and chambers

Description	Pk	Cat. No.	
OptiCell 1100 starter kit containing 20 OptiCell 1100 chambers, 1 rack, 1 knife, 50 tips, 2 caps, 1 optical shield, manual, 1 mini CD	1	734-2221	•
	20	734-2222	
OptiCell 1100 chambers	100	734-2223	
	500	734-2224	

OptiCell™ MAX kits and chambers

Description	Pk	Cat. No.	
OptiCell MAX 2100 starter kit containing 5 OptiCell MAX 2100 chambers, 1 rack, 50 tips, hybridoma antibody production protocol/manual	1	734-2225	
	20	734-2226	
OptiCell MAX 2100 chambers	100	734-2227	

OptiCell™ separation kit and magnet

Description	Pk	Cat. No.
OptiMag cell separation kit containing 20 OptiCell 1100 chambers, 1 magnet, 1 rack, 50 tips, 2 clips,	1	392-0600
OptiMag cell separation protocol/manual		
OptiMag magnet	1	392-0601

OptiCell™ mailer kit

Description	Pk	Cat. No.
OptiCell mailer kit containing 5 OptiCell 1100 chambers, 50 tips, 5 OptiCell mailers, shipping	1	392-0602
protocol/manual		
OptiCell mailer	10	392-0603

Accessories

Description	Pk	Cat. No.
OptiCell rack for OptiCell 1100 and 2100	1	392-0604
OptiCell insertion tips	100	392-0605
OptiCell knife	3	392-0606

CELLine™ 1000 System

BD Biosciences



CELLine™ 1000, a membrane-based, disposable cell cultivation system, guarantees high cell densities and is easy to use for recombinant protein expression and high yield monoclonal antibody (MAb) production.

- The CELLine™ system yields antibody concentrations comparable to that of ascites - one CELLine™ flask can be used to produce as much antibody as 12 mice
- Harvest volumes result in antibody concentrations that are 50 to 100 times higher than both roller bottles and tissue culture flasks

STERILE

Description	Pk	Cat. No.
CELLine™ 1000	3	734-0389

* CELLine is a trademark of Integra Biosciences Inc.

BD Falcon™ Multiwell Cell Culture Plates

BD Biosciences



PS, sterile, non-pyrogenic

All tissue culture treatments render polystyrene hydrophilic and result in the incorporation of a variety of anionic functional groups that support cell culture. To ensure reproducible results and conditions, all BD Falcon™ tissue culture treatment is performed in a vacuum chamber.

- Labyrinth lid, condensation rings, and deep well design control contamination, reduce evaporation, and minimise edge effects
- Reliable vacuum-gas plasma tissue culture treatment provides well-to-well and plate-to-plate consistency
- Convenient, peel-open, medical-style packaging
- Individual and Ready-Stack (RS) trays are PET and recyclable

Colour: Clear

STERILE

Cell Culture

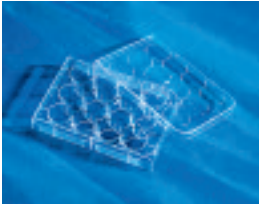
Cell Culture - Plates and Dishes

Description	Growth area		Packed	Pk	Cat. No.	
	Volume (ml)	(cm²)				
6-Well, TC-treated, flat-bottom, with lid	15.5	9.6	1/tray	50	734-0019	•
6-Well, TC-treated, flat-bottom, with lid	15.5	9.6	6/bag	36	734-0054	•
6-Well, TC-treated, flat-bottom, with lid	15.5	9.6	10/RS tray	60	736-2025	
12-Well, TC-treated, flat-bottom, with lid	6	3.8	1/tray	50	391-0006	•
12-Well, TC-treated, flat-bottom, with lid	6	3.8	6/bag	36	734-0055	•
24-Well, TC-treated, flat-bottom, with lid	3.5	2	1/tray	50	734-0020	•
24-Well, TC-treated, flat-bottom, with lid	3.5	2	6/bag	36	734-0056	•
48-Well, TC-treated, flat-bottom, with lid	1.4	0.75	1/tray	50	734-0028	•
48-Well, TC-treated, flat-bottom, with lid	1.4	0.75	6/bag	36	734-0058	
24-Well, TC-treated, flat-bottom, with lid	3.5	2	10/RS tray	60	736-2026	
96-Well, TC-treated, flat-bottom, with lid	0.37	0.32	14/RS tray	84	736-2027	
96-Well, TC-treated, flat-bottom, with lid	0.37	0.32	25/bag	100	734-1376	•
96-Well, TC-treated, round-bottom, without lid	0.32	0.36	1/tray	50	734-0026	
96-Well plate lid	-	-	1/bag	50	734-0022	
6-Well, non-treated, flat bottom with lid	15.5	9.6	1/tray	50	734-0948	•
24-Well, non-treated, flat bottom with lid	3.5	2	1/tray	50	734-0949	

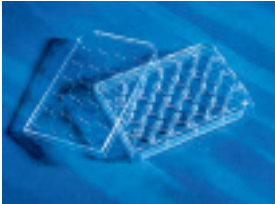
Multiple Well Cell Culture Plates, Costar®
Corning



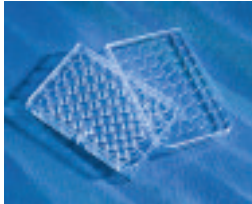
734-1599



734-1598



734-1604



734-1607



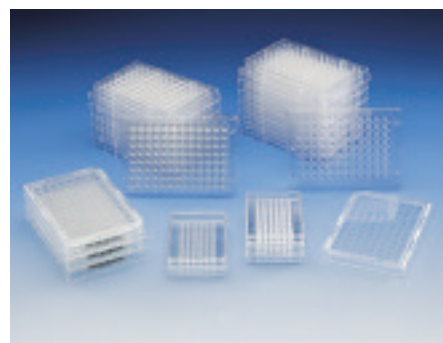
Clear PS, flat bottom, with lid

Available with a choice of surface treatments.

- Non reversible lids with condensation rings to reduce contamination
- Uniform footprint for ease of stacking
- Individual alphanumeric codes for well identification
- Sterilised by gamma radiation
- Certified non pyrogenic

Description	Pk	Cat. No.	
6-Well plates, TC treated, individually wrapped	50	734-1599	•
6-Well plates, TC treated	100	734-1596	•
6-Well plates, Corning® CellBIND® surface	50	734-1210	
6-Well plates, Ultra-Low Attachment surface, individually wrapped	24	734-1582	•
12-Well plates, TC treated, individually wrapped	50	734-1598	•
12-Well plates, TC treated	100	734-1597	•
12-Well plates, Corning® CellBIND® surface	50	734-1211	
24-Well plates, TC treated, individually wrapped	50	734-1605	
24-Well plates, TC treated, individually wrapped	100	734-1604	•
24-Well plates, TC treated	100	734-1606	
24-Well plates, Corning® CellBIND® surface	50	734-1212	
24-Well plates, Ultra-Low Attachment surface, individually wrapped	24	734-1584	
48-Well plates, TC treated, individually wrapped	100	734-1607	•
48-Well plates, Corning® CellBIND® surface	50	734-4067	

MicroWell™ Plates and MiniTrays, Nunclon™ Δ



PS, high flange design, sterile

Ideal for cell culture, cloning, viral titrations, and cell fusion.

- Plate edges and lids designed to reduce evaporation
- Raised well rims reduce risk of cross-contamination
- Lids shaped to facilitate stacking and handling
- 96 well footprint fits standard equipment
- Plates tolerate low speed centrifugation with spacer plate (Cat. No. 391-1934) as support

Colour: Clear

External LxW: MicroWell™ plates 128x86 mm; MicroWell™ MiniTrays 84x59 mm



Description	Recommended working			
	volume (μl)	Pk	Cat. No.	
96 MicroWell™ plate, flat bottomed wells, with lid	200	50	734-2097	•
	200	160	734-2073	•
96 MicroWell™ plate, flat bottomed wells, without lid	200	50	732-2607	•
	200	180	732-2601	
96 MicroWell™ plate, round bottomed wells, with lid	200	50	734-2080	•
96 MicroWell™ plate, round bottomed wells, without lid	200	50	734-2033	•
60 MicroWell™ MiniTray, conical wells, with lid	8	150	734-2079	•
72 MicroWell™ MiniTray, conical wells, with lid	8	150	734-2005	

Multidishes, Nunclon™ Δ



PS, sterile, with lid

Useful in all areas of cell culture, including scale up and cloning.

- Raised well rims lower the risk of cross contamination
- Flat bottom wells allow optimum optical quality
- Nunclon™ Δ certified

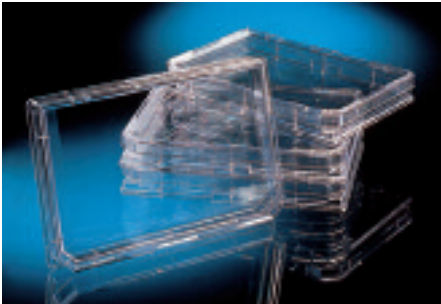


Description	Recommended working			Cat. No.	
	volume (ml)	Growth area (cm²)	Pk		
4-Well multidish, 66x66 mm	1.0	1.9	120	734-2176	•
6-Well multidish, 128x86 mm	3.0	9.6	75	391-8036	•
	3.0	9.6	85	734-0991	•
12-Well multidish, 128x86 mm	2.0	3.5	75	734-2156	•
24-Well multidish, 128x86 mm	1.0	1.9	75	734-0992	•
	1.0	1.9	85	734-0993	•
48-Well multidish, 128x86 mm	0.5	1.1	75	734-2157	•
	0.5	1.1	85	734-1147	•

Cell Culture

Cell Culture - Plates and Dishes

OmniTrays, NuncTM Δ
NuncTM



PS, sterile, with lid

Single well OmniTrays are ideal for a variety of uses.

- Standard microplate format with notched corners make them suitable for robotic handling
- Certified surface treatment for optimal cell growth and attachment

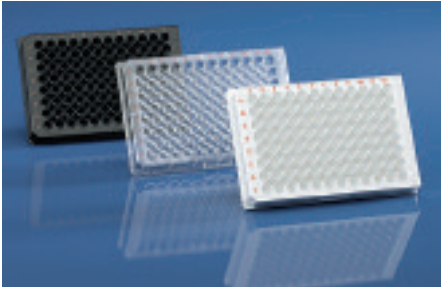
Culture area: 84 cm²
External dimensions: 128x86 mm



Description	Recommended working volume (ml)	Pk	Cat. No.
OmniTray	90	60	732-2602

96-Well Microplates for Cell Culture, BRANDplates[®]

Brand



PS, solid or with transparent base

Plates are available with different well shapes (round U-bottom, conical V-bottom, flat F-bottom or C flat bottom with curved edges), in different colours, and with a choice of cell culture treated surfaces.

- All BRANDplates[®] are alphanumerically labelled, stackable and compatible with most standard microplate readers and washers
- Standard 96-well plates have coloured alphanumeric code identifying surface type (cell culture treated orange, immuno treated blue, non-treated grey)
- White plates provide maximum reflection and minimum crosstalk during luminescence measurements; black plates provide minimum back light scatter

during fluorescence analyses

- Sterile plates are supplied individually wrapped with lid

BRANDplates[®] are non cytotoxic according to ISO 10993-5, free of endotoxins (<0.01 EU/ml), and free of DNA, DNase and RNase. Sterile products comply with ISO 11137 and AAMI guidelines.

cellGradeTM

The standard surface for cultivation of adherent cell lines. Chemical groups on the surface of the plate bind to serum compounds, stimulating the growth of immobilised cells.

Description	Colour	Culture area (cm ²)	Well volume	Pk	Cat. No.
Standard plate with U-bottom	transparent	0.32	330 µl	50	735-2097
Standard plate with V-bottom	transparent	0.33	360 µl	50	735-2098
Standard plate with F-bottom	transparent	0.32	350 µl	50	735-2099
Standard plate with F-bottom	white	0.32	350 µl	50	735-2100
Standard plate with F-bottom	black	0.32	350 µl	50	735-2101
Standard plate with C-bottom	transparent	0.25	350 µl	50	735-2102
Transparent base with F-bottom	white	0.31	330 µl	50	735-2103
Transparent base with F-bottom	black	0.31	330 µl	50	735-2104

cellGradeTM plus

This surface has a protein like structure. Cultivation of cells in serum reduced media is possible. cellGradeTM plus surface is suitable for the cultivation of more fastidious cell lines.

Description	Colour	Culture area (cm ²)	Well volume	Pk	Cat. No.
Standard plate with F-bottom	transparent	0.32	350 µl	50	735-2116
Standard plate with F-bottom	white	0.32	350 µl	50	735-2117
Standard plate with F-bottom	black	0.32	350 µl	50	735-2118
Transparent base with F-bottom	white	0.31	330 µl	50	735-2119
Transparent base with F-bottom	black	0.31	330 µl	50	735-2120

cellGradeTM premium

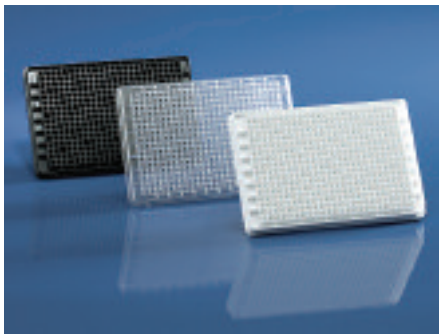
This surface is a Poly-D-Lysine equivalent. With the optimised surface characteristics, the most fastidious cell lines can be cultivated. Cells show growth comparable to Poly-D-Lysine surfaces.

Description	Colour	Culture area (cm ²)	Well volume	Pk	Cat. No.
Standard plate with F-bottom	transparent	0.32	350 µl	50	735-2124
Standard plate with F-bottom	white	0.32	350 µl	50	735-2125
Standard plate with F-bottom	black	0.32	350 µl	50	735-2126
Transparent base with F-bottom	white	0.31	330 µl	50	735-2127
Transparent base with F-bottom	black	0.31	330 µl	50	735-2128

inertGrade™

Surface inhibits cell binding. Especially suited for the cultivation of cells when adhesion is not desired, for example when working with cell suspensions or stem cells.

Description	Colour	Culture area (cm ²)	Well volume	Pk	Cat. No.
Standard plate with U-bottom	transparent	0.32	330 µl	50	735-2082
Standard plate with F-bottom	transparent	0.32	350 µl	50	735-2083
Standard plate with U-bottom	white	0.32	330 µl	50	735-2084
Standard plate with F-bottom	white	0.32	350 µl	50	735-2085
Standard plate with C-bottom	white	0.25	350 µl	50	735-2086
Standard plate with U-bottom	black	0.32	330 µl	50	735-2087
Standard plate with F-bottom	black	0.32	350 µl	50	735-2088
Standard plate with C-bottom	black	0.25	350 µl	50	735-2089
Transparent base with F-bottom	white	0.31	330 µl	50	735-2090
Transparent base with F-bottom	black	0.31	330 µl	50	735-2091

384-Well HTS Microplates for Cell Culture, BRANDplates®**Brand****PS, solid or with transparent base**

These flat bottom plates are available in different colours, and with standard or transparent base formats.

cellGrade™

The standard surface for cultivation of adherent cell lines. Chemical groups on the surface of the plate bind to serum compounds, stimulating the growth of immobilised cells.

Description	Colour	Well volume (µl)	Culture area (cm ²)	Pk	Cat. No.
Standard plate with F-bottom	transparent	100	0.12	50	735-2105
Standard plate with F-bottom	white	100	0.12	50	735-2106
Standard plate with F-bottom	black	100	0.12	50	735-2107
Standard plate with F-bottom, low volume	transparent	30	0.07	50	735-2108
Standard plate with F-bottom, low volume	white	30	0.07	50	735-2109
Standard plate with F-bottom, low volume	black	30	0.07	50	735-2110
Transparent base with F-bottom	white	120	0.13	50	735-2111
Transparent base with F-bottom	black	120	0.13	50	735-2112

cellGrade™ plus

This surface has a protein like structure. Cultivation of cells in serum reduced media is possible. cellGrade™ plus surface is suitable for the cultivation of more fastidious cell lines.

Description	Colour	Well volume (µl)	Culture area (cm ²)	Pk	Cat. No.
Standard plate with F-bottom	transparent	100	0.12	50	735-2121
Transparent base with F-bottom	white	120	0.13	50	735-2122
Transparent base with F-bottom	black	120	0.13	50	735-2123

Cell Culture

Cell Culture - Plates and Dishes

cellGrade™ premium

This surface is a Poly D Lysine equivalent. With the optimised surface characteristics, the most fastidious cell lines can be cultivated. Cells show growth comparable to Poly D Lysine surfaces.

Description	Colour	Well volume (µl)	Culture area (cm²)	Pk	Cat. No.
Standard plate with F-bottom	transparent	100	0.12	50	735-2129
Transparent base with F-bottom	white	120	0.13	50	735-2130
Transparent base with F-bottom	black	120	0.13	50	735-2131

inertGrade™

Surface inhibits cell binding. Especially suited for the cultivation of cells when adhesion is not desired, for example when working with cell suspensions or stem cells.

Description	Colour	Well volume (µl)	Culture area (cm²)	Pk	Cat. No.
Standard plate with F-bottom	transparent	100	0.12	50	735-2092
Standard plate with F-bottom	white	100	0.12	50	735-2093
Standard plate with F-bottom	black	100	0.12	50	735-2094
Transparent base with F-bottom	white	120	0.13	50	735-2095
Transparent base with F-bottom	black	120	0.13	50	735-2096

1536-Well HTS Microplates for Cell Culture, BRANDplates®

Brand

PS

Cell culture treated flat bottomed plates.

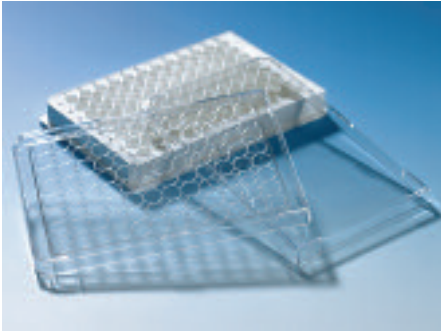
cellGrade™

The standard surface for cultivation of adherent cell lines. Chemical groups on the surface of the plate bind to serum compounds, stimulating the growth of immobilised cells.

Description	Colour	Well volume (µl)	Culture area (cm²)	Pk	Cat. No.
Standard plate with F-bottom	transparent	10	0.02	50	735-2113
Standard plate with F-bottom	white	10	0.02	50	735-2114
Standard plate with F-bottom	black	10	0.02	50	735-2115

Lids for BRANDplates®

Brand



Description	Pk	Cat. No.
With condensation rings for standard 96-well plates	100	732-1131
Without condensation rings for 96-well plates	100	732-1132
Without condensation rings for 384-well plates	50	732-1133
Without condensation rings for 1536-well plates	50	732-1134

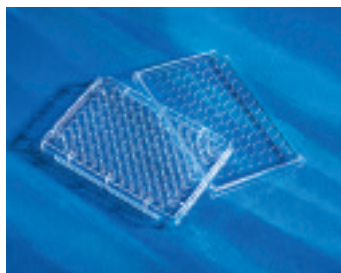
VWR Collection

The solution to your everyday needs

Please contact your local VWR sales office or go to www.vwr.com for the latest news and special offers

96 Well Cell Culture Plates

Corning



PS, clear, with lid

- CellBIND® Surface increases wettability for more even and consistent cell attachment
- Ultra-Low Attachment plates feature a covalently bound hydrogel layer that minimises cell attachment, protein absorption and cellular activation
- Sterilised by gamma irradiation
- Certified non pyrogenic



Description	Pk	Cat. No.
Standard plate, flat bottom, CellBIND® surface	50	734-4058
Standard plate, flat bottom, Ultra-Low Attachment, individually wrapped	24	734-1585
Standard plate, flat bottom, TC-treated, with low evaporation lid	50	734-1789
Standard plate, flat bottom, TC-treated, with low evaporation lid, individually wrapped	50	734-1793
Standard plate, flat bottom, TC-treated, individually wrapped	50	734-1794
Standard plate, flat bottom, TC-treated, individually wrapped	100	734-1796
Round bottom plate, TC-treated, individually wrapped	50	734-1797
Standard plate, flat bottom, TC-treated	50	734-1799
Round bottom plate, Ultra-Low Attachment, individually wrapped	24	444-1020

96 Well Plates, Untreated

Corning



PP plate with PS lid

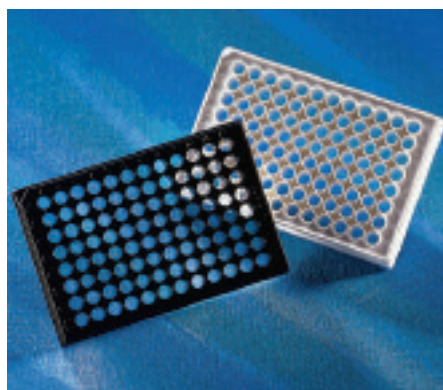
- Sterilised by gamma radiation
- Certified non pyrogenic



Description	Pk	Cat. No.
96 Well plate with round bottom, individually wrapped	50	732-5541

96 Well Cell Culture Plates for Fluorescent and Luminescent Applications

Corning



PS

- Black plates are designed to lower background in fluorescent assays and reduce cross-talk
- White plates are designed for luminescent assays
- Treated for optimal cell attachment
- Sterilised by gamma irradiation
- Certified non pyrogenic

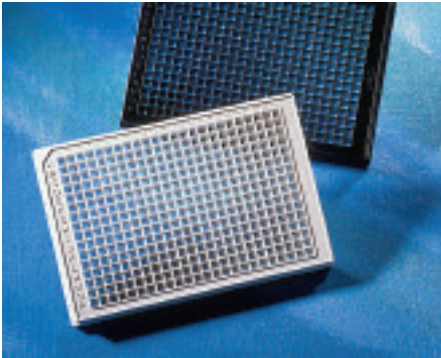
Cell Culture

Cell Culture - Plates and Dishes

Description	Pk	Cat. No.
Solid white plate, TC treated, without lid	100	734-1549
Black plate with clear bottom, TC treated, individually wrapped	48	734-1609
White plate with clear bottom, TC treated, individually wrapped	48	734-1610
White plate with clear bottom, TC treated	100	734-1660
Black plate with clear bottom, TC treated	100	734-1661
Solid black plate, TC treated	100	734-1664
Solid white plate, TC treated	100	734-1665

384 Well Clear Bottom Cell Culture Plates

Corning



PS, flat bottom, with lid

Black plates are designed to lower background in fluorescent assays and reduce cross-talk. White plates are designed for luminescent assays.

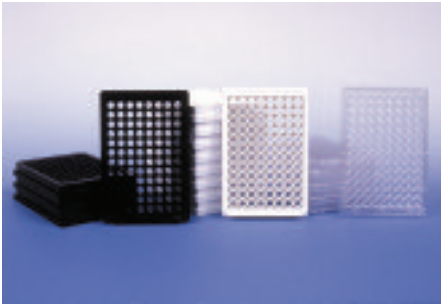
- Treated for optimal cell attachment
- Sterilised by gamma radiation
- Certified non pyrogenic



Description	Sterile	Pk	Cat. No.
Standard clear plate, poly-D-lysine coated	+	100	734-1615
White plate with clear bottom, poly-D-lysine coated	+	100	734-1616
Black plate with clear bottom, poly-D-lysine coated	+	100	734-1617
Black optical imaging plate with clear bottom, TC treated	+	100	734-1200

Optical Bottom Plates, 96-Well, Nunclon™Δ

Nunc™



PS plate with either polymer or coverglass base, sterile, with lid

These plates, with white or black upper structure and clear base, are designed to provide optimum clarity for viewing well contents.

- Flat bottom well geometry for plate reader access
- Footprint compatible with standard equipment and automated systems
- Surface treatment ensures optimal cell attachment and growth
- No. 1.5 coverglass base for minimum light scatter and low autofluorescence ensures accurate results due to higher signal to noise ratios

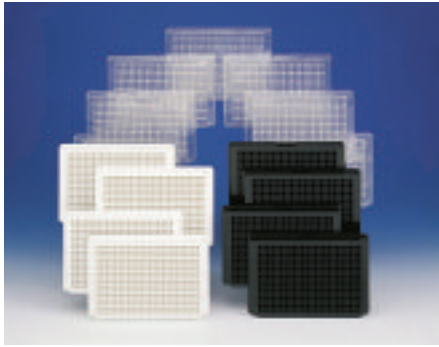
Working range: 50-200 µl/well



Description	Colour	Pk	Cat. No.
96-Well optical bottom plate with polymer base	black	30	732-2604
	white	30	732-2605
96-Well optical bottom plate with coverglass base	black	30	734-2088
	white	30	734-2089

Cell Culture Plates, 384 Well, Nunclon™Δ

Nunc™



PS, tissue culture-treated, sterile

Ideal for cell culture, cell fusion, cloning and viral titrations.

- Nunclon™Δ surface treatment for optimal cell growth and attachment
- Non-toxic, non-pyrogenic
- Rounded square wells eliminate wicking
- Optimised for scintillation counting

Working range: 10-100 µl



Description	Colour	Pk	Cat. No.
384-Well plate, flat bottom, with lid	transparent	30	734-2091
384-Well plate, flat bottom, without lid	transparent	100	734-2083
384-Well plate, flat bottom, with lid	black	30	734-2084
384-Well plate, flat bottom, without lid	black	100	734-2085
384-Well plate, flat bottom, with lid	white	30	734-2090
384-Well plate, flat bottom, without lid	white	100	734-2095

Lids for Microtitre Plates

Nunc™

Description	Pk	Cat. No.
Lid for 96-well MicroWell plate, with cut-off corners and condensation rings	100	734-2184
Lid for 96-well MicroWell plate, sterile, with cut-off corners and condensation rings	50	734-2185
Lid for 384-well MicroWell plate, with cut-off corners and evaporation barrier, individually wrapped	60	732-2732
Lid for 384-well MicroWell plate, sterile, with cut-off corners and evaporation barrier	180	732-2733
Low profile lid for standard height 384-well plates and OmniTrays	120	732-2752
Universal lid, non-sterile, for standard height 384- and 1536-well plates	180	732-2704

BD Primaria™ Multiwell Cell Culture Plates

BD Biosciences



PS, sterile, with lid

The gases used to manufacture BD Primaria™ contain both oxygen and ammonia, resulting in the incorporation in the surface of a variety of nitrogen-containing functional groups in addition to the negatively charged oxygen-containing groups found on traditional tissue culture treated surfaces. The incorporation of nitrogen-containing cations has been correlated to attachment and spreading of primary endothelial cells in a clonal cell-growth assay. The complex surface on BD Primaria™ products is homogeneous and stable and is used to improve attachment and differentiation of a variety of cell types. The surface chemistry of BD Primaria™ products is confirmed by Electron Scanning for Chemical Analysis (ESCA).

- Unique, nitrogen-containing tissue culture surface chemistry improves attachment, spreading and growth for many primary cells or cell lines
- Optically clear and no special storage required
- Convenient, peel-open, medical-style packaging



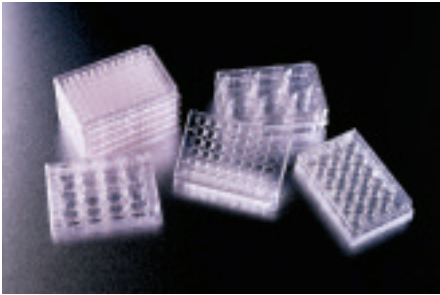
Description	Volume (ml)	Growth area (cm²)	Pk	Cat. No.
BD Primaria™ 6-well cell culture plate	15.5	9.6	50	734-0077
BD Primaria™ 24-well cell culture plate	3.5	2.0	50	734-0078
BD Primaria™ 96-well cell culture plate	0.37	0.32	50	734-0079

Cell Culture

Cell Culture - Plates and Dishes

BD BioCoat™ Collagen I Cell Culture Plates

BD Biosciences



PS coated with rat tail collagen type I, sterile, non-pyrogenic

Collagen is an integral part of the framework that holds cells and tissues together and has been recognized as a useful matrix for improving cell culture. In vitro use of collagen can exert effects on the adhesion, morphology, growth, migration, and differentiation of a variety of cell types. Applications include promotion of cell attachment and spreading, rapid expansion of cell populations, serum-free or reduced serum culture, studies of the effects of collagen I on cell behavior, improving survival of primary cell lines in culture, and cell adhesion assays.

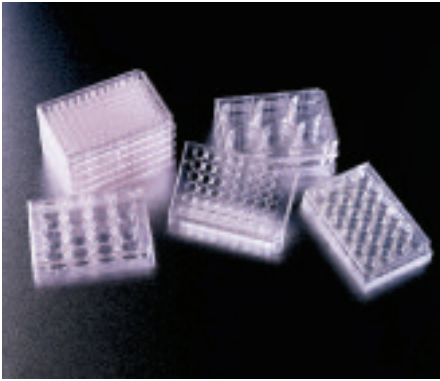
- Uniform application of rat tail collagen type I for consistent performance
- Manufactured in a highly controlled environment, and rigorously tested to assure product consistency and performance



Description	Colour	Pk	Cat. No.	
6-Well plate	transparent	5	734-0108	•
	transparent	50	734-0274	
12-Well plate	transparent	50	734-0295	
24-Well plate	transparent	5	734-0115	•
	transparent	50	734-0277	•
48-Well plate	transparent	50	734-0296	
	transparent	5	734-0114	•
96-Well plate	transparent	50	734-0276	•
	black/clear	50	734-0319	
	white/clear	50	734-0320	
	white	50	734-0303	
	black/clear	50	734-0332	
384-Well plate	white/clear	50	734-0329	
	transparent	50	734-0331	
	white	50	734-0330	

BD BioCoat™ Poly-L-Lysine and Poly-D-Lysine Cell Culture Plates

BD Biosciences



PS, coated with Poly-L-Lysine or Poly-D-Lysine, sterile, non-pyrogenic

Poly-D-Lysine (PDL) and Poly-L-Lysine (PLL) are synthetic compounds that enhance cell adhesion and protein absorption by altering surface charges on the culture substrate. Poly-L-Lysine and Poly-D-Lysine surface treatments support applications including attachment and spreading of a variety of cell lines; cell differentiation and neurite outgrowth; attachment of transfected cell lines; and survival of primary neurons in culture. As PDL and PLL are synthetic molecules, they do not stimulate biological activity in the cells cultured on them, and they do not introduce impurities carried by natural polymers.



BD BioCoat™ Poly-D-Lysine

Description	Colour	Pk	Cat. No.	
6-Well plate	transparent	5	734-0120	
12-Well plate	transparent	5	734-0151	
24-Well plate	transparent	5	734-0121	
48-Well plate	transparent	5	734-0174	

Description	Colour	Pk	Cat. No.
96-Well plate	transparent	5	734-0146
	black/clear	5	734-0245
	black/clear	50	734-0317
	white/clear	5	734-0250
	white/clear	50	734-0321
	white	5	734-0237
	white	50	734-0316
384-Well plate	black/clear	50	734-0328
	white/clear	50	734-0325
	transparent	50	734-0327
	white	50	734-0326

BD BioCoat™ Poly-L-Lysine

Description	Colour	Pk	Cat. No.
6-Well plate	transparent	50	734-0299
96-Well plate	transparent	50	734-0300

BD BioCoat™ Fibronectin Cell Culture Plates

BD Biosciences

**PS, coated with fibronectin, sterile, non-pyrogenic**

Fibronectin-coated cell culture plates have a number of applications, including the promotion of cell attachment, proliferation and differentiation of a variety of cell types, particularly fibroblasts and other mesenchymally derived cells.



Description	Colour	Pk	Cat. No.
6-Well plate	transparent	5	734-0110
24-Well plate	transparent	5	734-1316
96-Well plate	transparent	5	734-0116

BD BioCoat™ Laminin Cell Culture Plates

BD Biosciences

PS, coated with mouse laminin, sterile, non-pyrogenic

Laminin, a major structural component of basement membranes, has many varied functions that are mediated by binding to various components of the basement membrane (for example, collagen IV) and to cell-surface receptors. Laminin-coated cell culture plates have a number of applications, including the promotion of cell adhesion, proliferation and differentiation of a variety of cell types, particularly neurons, epithelial cells, myocytes and myoblasts.



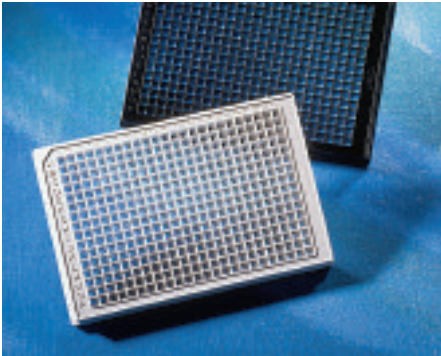
Description	Colour	Pk	Cat. No.
6-Well plate	transparent	5	734-0112
24-Well plate	transparent	5	734-0118
96-Well plate	transparent	5	734-0117

Cell Culture

Cell Culture - Plates and Dishes

96 Well Cell Culture Plates, Poly-D-lysine Coated

Corning



PS, flat bottom, without lid

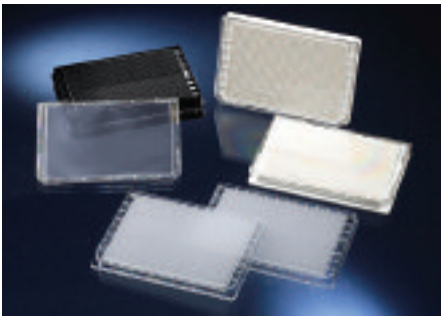
- Enhanced cell attachment and binding, especially in assays for difficult to attach cells
- Helps cells stay attached during washing steps
- Aseptically manufactured
- Black plates are designed for lower background in fluorescent assays and reduce crosstalk; white plates are designed for luminescent assays



Description	Pk	Cat. No.
Standard clear plate, poly-D-lysine coated	100	734-1618
White plate with clear bottom, poly-D-lysine coated	100	734-1619
Black plate with clear bottom, poly-D-lysine coated	100	734-1620

Plates, Collagen I Coated

Nunc™



PS ready-to-use plates pre-coated with Collagen I, with lid

- Consistent growth surface from each lot ensures guaranteed performance
- High quality surface promotes cell attachment, growth and differentiation in serum-free and serum-containing media
- Stable at room temperature

WxL: 128x86 mm

Description	Colour	Pk	Cat. No.
MicroWell plate, F96, high flange design	transparent	20	734-1185
	black	20	734-1183
	white	20	734-1187
6-Well multidish, flat bottom	transparent	20	735-0226
384-Well optical bottom plate, pinchbar design	black	20	734-1188

Plates, Poly-D-Lysine Coated

Nunc™



PS ready-to-use plates pre-coated with Poly-D-Lysine, with lid

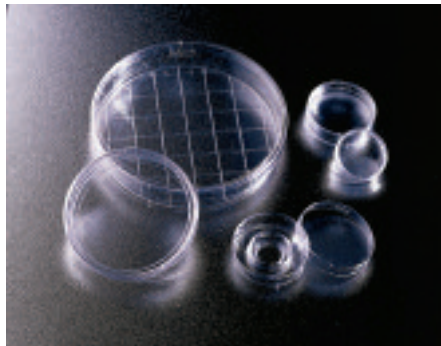
- Consistent growth surface from each lot ensures guaranteed performance
- High quality surface promotes cell attachment, growth and differentiation in serum-free and serum-containing media
- Stable at room temperature

WxL: 128x86 mm

Description	Colour	Pk	Cat. No.
MicroWell plate, F96, high flange design	transparent	20	734-1186
	black	20	734-1184
	white	20	734-1177

BD Falcon™ Cell Culture Dishes

BD Biosciences



PS, sterile, with lid

Designed for cell culture, these dishes have a uniform surface chemistry, created by vacuum-gas plasma treatment, which promotes cell attachment. The hydrophilic tissue culture surface contains a variety of negatively charged functional groups that support cell attachment and spreading. The design and frosted rim of the Easy-Grip dish improves handling of small dishes. The ability to pick up a small dish conveniently, without accidentally removing the lid, allows faster working and improves aseptic manipulation.

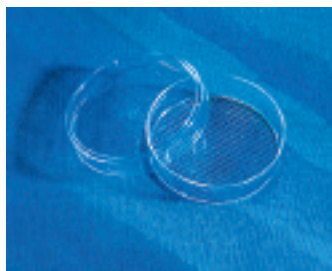
- Flat and optically clear for distortion-free microscopic visualisation of cells
- Lids designed for optimal gas exchange
- Stacking rings allow for easier stacking and handling
- Cell performance tested to ensure consistent results



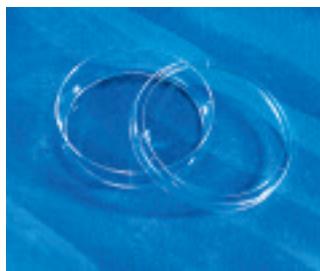
Description	Recommended working	Culture area			
	volume (ml)	(cm²)	Pk	Cat. No.	
Easy-Grip dishes, 35x10 mm	2.5-3.0	11.78	500	734-0005	•
Centre-Well organ culture dish, 60x15 mm	-	2.89	500	734-0016	•
Easy-Grip dishes, 60x15 mm	6.0-7.0	19.5	500	734-0007	•
Standard dishes, 60x15 mm	6.0-7.0	21.29	500	734-0961	•
Standard dishes, 100x20 mm	16.0-17.5	58.95	200	734-0006	•
Dishes with 20 mm grid moulded in base, 150x25 mm	45.0-50.0	156.36	100	734-0013	•

Cell Culture Dishes, Treated

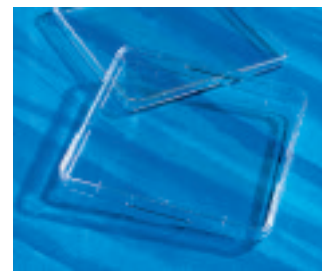
Corning



734-1703



734-1815



734-1727



Optically clear PS

Available with a choice of treated surface. Corning® CellBIND® Surface increases surface wettability for more even and consistent cell attachment. Ultra-Low Attachment dishes feature a covalently bound hydrogel layer that minimises cell attachment, protein absorption and cellular activation.

- With stacking beads to aid handling
- Supplied with vents to provide consistent gas exchange
- Sterilised by gamma radiation
- Certified non pyrogenic

Description	Recommende	Culture area			Cat. No.	
	d working	volume (ml)	(cm ²)	Pk		
Dishes, Ø35x10 mm, CellBIND® surface		1.8-2.7	8	210	734-4055	
Dishes, Ø35x10 mm, TC treated surface		1.8-2.7	8	500	734-1698	
Dishes, Ø60x15 mm, CellBIND® surface		4.2-6.3	21	126	734-4056	
Dishes, Ø60x15 mm, TC treated surface		4.2-6.3	21	500	734-1699	•
Dishes, Ø60x15 mm, Ultra-Low Attachment surface		4.2-6.3	21	20	734-0884	
Dishes, Ø60x15 mm with 2 mm grid, TC treated surface		4.2-6.3	21	500	734-1703	
Dishes, Ø100x20 mm, Ultra-Low Attachment surface		11-16.5	55	20	734-0885	
Dishes, Ø100x20 mm, CellBIND® surface		11-16.5	55	40	734-4057	
Dishes, Ø100x20 mm, TC treated		11-16.5	55	500	734-1815	•
Dishes, Ø100x20 mm, TC treated, in 6-pack carriers		11-16.5	55	480	734-1705	
Dishes, Ø150x25 mm, TC treated		30.4-45.6	148	60	734-1711	•
Dishes, square, 245x25 mm, TC treated*		100-150	500	16	734-1727	

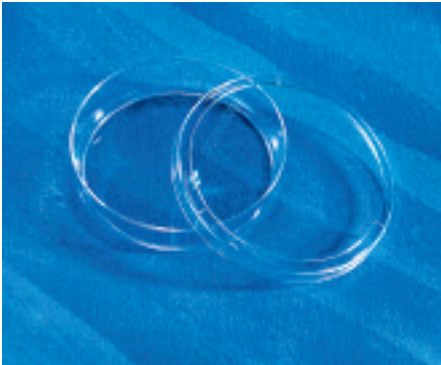
*Interior dimensions 224x224 mm

Cell Culture

Cell Culture - Plates and Dishes

Cell Culture Dishes, Untreated

Corning



Optically clear PS

For applications where cell attachment is not desired.

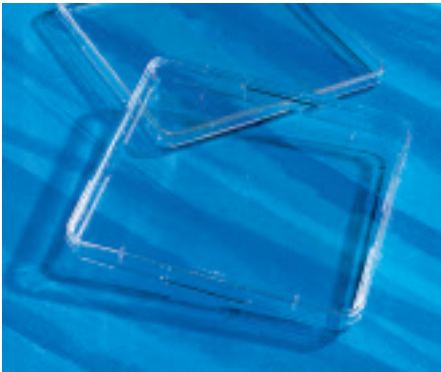
- With stacking beads to aid handling
- Supplied with vents to provide consistent gas exchange
- Sterilised by gamma radiation
- Certified non pyrogenic



Description	Recommended working		Pk	Cat. No.	
	volume (ml)	Culture area (cm ²)			
Dishes, Ø35x10 mm	1.8-2.7	9	500	734-1707	
Dishes, Ø60x15 mm	4.2-6.3	21	500	734-1708	
Dishes, Ø100x20 mm	11-16.5	55	500	734-1709	
Dishes, Ø150x25 mm	30.4-45.6	152	60	734-1710	
Dishes, square, 224x224 mm	100-150 ml	500	16	734-1728	

BioAssay Dishes, 245 mm Square

Corning



PS, with lids

Designed with a stacking bead so that they will stack securely without slipping.

- Compatible with automated colony picking instruments
- Certified non pyrogenic



Description	Pk	Cat. No.
BioAssay dish, 18 mm deep, untreated	16	734-1731
BioAssay dish, 12.5 mm low profile, untreated	20	734-1732

Cell Culture Dishes, Nunclon™ Δ

Nunc™



PS, (except 734-2113, made of Permanox™), sterile, with lid

A large range of dishes, which have been tissue culture-treated (except 734-2109, suitable for suspension cultures, which is not treated).

- Optically clear and uniform surface suitable for microscopy
- 60 mm and 40 mm dishes available with grids for cloning or determination of plating efficiency
- Nunclon™ Δ certified (except 734-2109)



Description	Recommended		Pk	Cat. No.	
	working volume (ml)	Growth area (cm ²)			
35x10 mm, without grid or air vent	3.0	8.8	500	734-2041	•
35x10 mm, without grid, with air vent	3.0	8.8	500	734-2045	•
35x10 mm, with 2x2 mm grid and air vent	3.0	8.8	500	734-2114	
35x10 mm, untreated, without grid, with air vent	3.0	8.8	500	734-2109	
60x15 mm, without grid, with air vent	5.0	20.8	500	734-2113	
60x15 mm, without grid or air vent	5.0	21.5	400	734-2042	•
60x15 mm, without grid, with air vent	5.0	21.5	400	734-2040	•
60x15 mm, with 2x2 mm grid and air vent	5.0	21.5	400	734-2103	
100x15 mm, without grid, with air vent	12.5	56.7	150	734-2043	•
	12.5	56.7	480	734-2112	•
150x20 mm, without grid, with air vent	35	145	80	734-1403	•
245x245x25 mm, without grid or air vent	135	500	16	734-2096	•

BD Primaria™ Cell Culture Dishes

BD Biosciences



PS, sterile, with lid

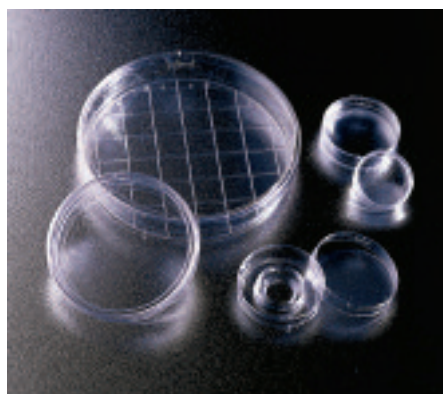
The gases used to manufacture BD Primaria™ contain both oxygen and ammonia, resulting in the incorporation in the surface of a variety of nitrogen-containing functional groups in addition to the negatively charged oxygen containing groups found on traditional tissue culture treated surfaces. The incorporation of nitrogen containing cations has been correlated to attachment and spreading of primary endothelial cells in a clonal cell-growth assay. The complex surface on BD Primaria™ products is homogeneous and stable and is used to improve attachment and differentiation of a variety of cell types. The surface chemistry of BD Primaria™ products is confirmed by Electron Scanning for Chemical Analysis (ESCA).

- Unique, nitrogen-containing tissue culture surface chemistry improves attachment, spreading and growth for many primary cells or cell lines
- Optically clear and no special storage required
- Convenient, peel open, medical-style packaging

Description	Recommended		Pk	Cat. No.	
	working volume (ml)	Culture area (cm ²)			
BD Primaria™ Easy-Grip dishes, 35x10 mm	2.5-3.0	11.78	200	734-0070	•
BD Primaria™ standard dishes, 60x15 mm	6.0-7.0	21.29	200	734-0071	•
BD Primaria™ standard dishes, 100x20 mm	16.0-17.5	58.95	200	734-0072	•

BD BioCoat™ Collagen I Cell Culture Dishes

BD Biosciences



PS coated with rat tail collagen type I, sterile, non-pyrogenic

Collagen I, found in most tissues and organs, is most plentiful in dermis, tendon and bone. It is an integral part of the framework that holds cells and tissues together and has been recognized as a useful matrix for improving cell culture. In vitro use of collagen can exert effects on the adherence, morphology, growth, migration and differentiation of a variety of cell types.

- Manufactured in a highly controlled environment and rigorously tested to assure product consistency and performance
- Stable at room temperature when stored in dry conditions



Description	Pk	Cat. No.	
Culture dish, Ø 35 mm	20	734-0141	
	100	734-0281	
Culture dish, Ø 60 mm	20	734-0109	
	100	734-0275	
Culture dish, Ø 100 mm	10	734-0136	
	40	734-0280	•

Cell Culture

Cell Culture - Plates and Dishes

BD BioCoat™ Poly-Lysine Cell Culture Dishes

BD Biosciences



PS, coated with poly-lysine

Poly-D-Lysine (PDL) and Poly-L-Lysine (PLL) are synthetic compounds that enhance cell adhesion and protein absorption by altering surface charges on the culture substrate. Poly-Lysine surface treatments support applications including attachment and spreading of a variety of cell lines; cell differentiation and neurite outgrowth; attachment of transfected cell lines; and survival of primary neurons in culture.

BD BioCoat™ Poly-D-Lysine

Description	Pk	Cat. No.
Culture dishes, 35 mm	100	734-0417
Culture dishes, 60 mm	100	734-0284
Culture dishes, 100 mm	40	734-0285

BD BioCoat™ Poly-L-Lysine

Description	Pk	Cat. No.
Culture dishes, 35 mm	100	734-0302
Culture dishes, 60 mm	100	734-0301

BD Falcon™ In Vitro Fertilisation Plasticware

BD Biosciences



Crystal grade PS, sterile, with lid

Pre-tested and certified plasticware for in-vitro fertilisation (IVF), designed for consistency and ease of use. These plates have perfectly flat, optically clear surfaces for optimum manipulation and observation of ova and embryos. Lids are designed for aseptic manipulation and consistent venting to maintain humidification.

- Non-embryotoxic, non-pyrogenic and non-cytotoxic
- Tissue culture treated for a consistent hydrophilic surface
- Sterilised by gamma irradiation
- Packaged in peel-open, medical-style packaging
- Multi-unit bags have reseal tabs



Description	Pk	Cat. No.
Round dish, Ø 60 mm, volume 23.0 ml	500	734-0068
1-Well round dish, Ø 60 mm, well volume 2.5 ml	500	734-0398
4-Well plate, well volume 1.8 ml, individually wrapped	100	734-0069

Instant value with

www.vwr.com

Please contact your local sales office for more information

Culture Dishes for In Vitro Fertilisation

Nunc™



PS, sterile, flat bottom, with lid

These fully certified dishes are specifically intended for in vitro fertilisation (IVF) use.

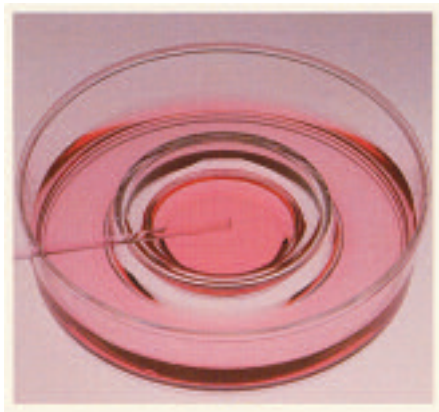
- Choice of Nunclon™Δ treated or non-treated surfaces
- Full batch control of all components in the final product giving full traceability
- Unique certification, based on a 1-cell stage mouse embryo toxicity test, confirms sterility (SAL 106), non-pyrogenicity, and that the material has passed USP class VI requirements



Description	Pk	Cat. No.
Nunclon™Δ treated 4-well dish, 66x66 mm, culture area 1.9 cm ² /well	120	734-1175
Untreated dish, 60x15 mm, culture area 21.5 cm ²	400	391-0108
Untreated dish, 40x12 mm, culture area 8.8 cm ²	500	391-0109

IVF Culture Dishes, Costar®

Corning



Optically clear virgin PS

IVF Culture Dishes with 20 mm centre well. Inner well holds 3 ml of medium while the outer well holds 10 ml. For research use only.

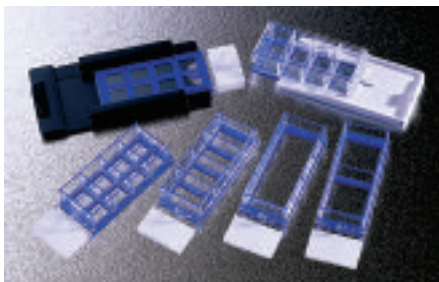
- 45° slope funnels oocyte/embryo into centre of well
- Stand-off rim on base protects optical surface from scratching
- Treated for optimal cell attachment
- Sterilised by gamma radiation
- Certified non pyrogenic



Description	Pk	Cat. No.
IVF culture dishes, 60x15 mm	500	734-1542

Chamber Slides, BD Falcon™ CultureSlides for in situ Analysis

BD Biosciences



Soda-lime glass slide; PS vessel, lid and tool

BD Falcon™ CultureSlides allow cells to be cultured and then analysed on a glass microscope slide. Cells are grown in a plastic chamber attached to a specially prepared microscope slide. Cells can be fixed and stained in situ without disruption of the cell monolayer.

- Chamber is easily and safely removed using the disposable safety removal tool supplied
- Pressure-sensitive, biocompatible, acrylic-adhesive gasket remains with the vessel after removal, not on the slide, facilitating further processing or placement of coverslips
- Blue hydrophobic border defines cell culture areas
- Wells numbered for easy identification
- Trays designed for incubator use

WxL: Slide 25x75 mm with 1.2 mm bevelled edge



Cell Culture

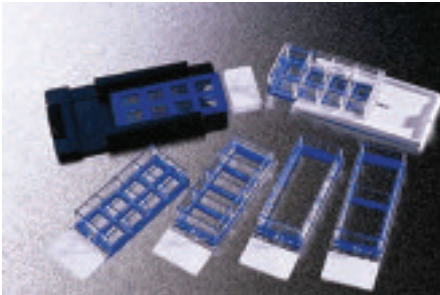
Cell Culture – Chamber Slides

Description	Recommended working		Pk	Cat. No.
	volume (ml)	Growth area (cm²)		
1-Well CultureSlide	5.0-6.5	8.6*	24	734-0086
1-Well CultureSlide	5.0-6.5	8.6*	96	734-0399
2-Well CultureSlide	2.0-2.5	4.0*	24	734-0087
2-Well CultureSlide	2.0-2.5	4.0*	96	734-0400
4-Well CultureSlide	1.0-1.5	1.7*	24	734-0088
4-Well CultureSlide	1.0-1.5	1.7*	96	734-0401
8-Well CultureSlide	0.8-0.8	0.7*	24	734-0089
8-Well CultureSlide	0.8-0.8	0.7*	96	734-0402

* per well

Chamber Slides, BD BioCoat™ Collagen I CultureSlides

BD Biosciences



Soda-lime glass slide; PS vessel, lid and tool

Collagen is an integral part of the framework that holds cells and tissues together and has been recognized as a useful matrix for improving cell culture. In vitro use of collagen can exert effects on the adhesion, morphology, growth, migration, and differentiation of a variety of cell types. BD BioCoat™ Collagen I CultureSlides allow cells to be cultured and then analysed on a glass microscope slide. Cells are grown in a plastic chamber attached to a specially prepared microscope slide. Cells can be fixed and stained in situ without disruption of the cell monolayer.

- Chamber is easily and safely removed using the disposable safety removal tool supplied
- Pressure-sensitive, biocompatible, acrylic-adhesive gasket remains with the vessel after removal, not on the slide, facilitating further processing or placement of coverslips
- Blue hydrophobic border defines cell culture areas
- Wells numbered for easy identification
- Trays designed for incubator use

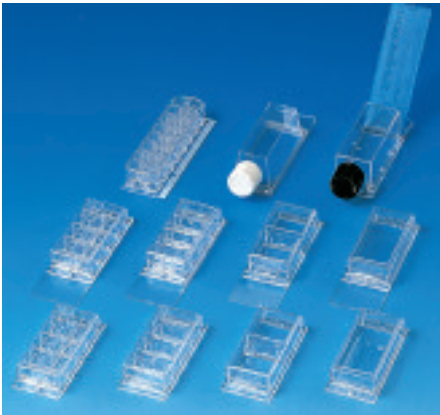
Slide WxL: 25x75 mm with 1.2 mm bevelled edge

Description	Recommended		Pk	Cat. No.
	working volume (ml)	Growth area (cm²)		
BD BioCoat™ Collagen I CultureSlides, 1-well	5.0-6.5	8.6*	12	734-0205
BD BioCoat™ Collagen I CultureSlides, 2-well	2.0-2.5	4.0*	12	734-0238
BD BioCoat™ Collagen I CultureSlides, 4-well	1.0-1.5	1.7*	12	734-0206
BD BioCoat™ Collagen I CultureSlides, 8-well	0.8-0.8	0.7*	12	734-0241

* per well

Chamber Slides, Lab-Tek™

Nunc™



PS medium chamber on glass or Permanox™ plastic slide, PS cover, sterile

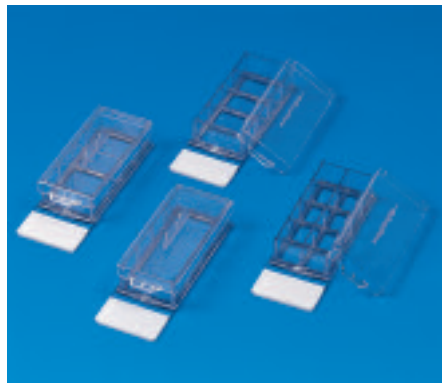
Useful for viral and mycoplasma testing, chromosome studies, toxicity tests and immunocytology. Permanox™ is a TC treated plastic surface with minimal fluorescence.

- Cells grow on a standard microscope slide
- No cell transfer needed prior to visualisation/staining
- Upper chamber can be removed when culturing is complete
- Suitable for use with fluorescent labels

Description	Recommended		Pk	Cat. No.	
	working volume (ml)	Growth area (cm ²)			
Chamber Slide™, glass, 1-chamber	2.5-4.5	9.4	16	734-2119	•
Chamber Slide™, glass, 2-chamber	1.2-2.0	4.2	16	734-2120	•
Chamber Slide™, glass, 4-chamber	0.5-0.9	1.8	16	734-2121	•
Chamber Slide™, glass, 8-chamber	0.2-0.4	0.8	16	734-2122	•
Chamber Slide™, glass, 16-chamber	0.1-0.2	0.4	16	734-2127	•
Chamber Slide™, Permanox™, 1-chamber	2.5-4.5	9.4	16	734-2123	
Chamber Slide™, Permanox™, 2-chamber	1.2-2.0	4.2	16	734-2124	•
Chamber Slide™, Permanox™, 4-chamber	0.5-0.9	1.8	16	734-2125	•
Chamber Slide™, Permanox™, 8-chamber	0.2-0.4	0.8	16	734-2126	•

Chamber Slides, Lab-Tek™ II

Nunc™



PS medium chamber on glass slide, PS lid, sterile

For culturing cells on a standard microscope slide. Useful for viral and mycoplasma testing, chromosome studies, toxic tests and immunocytology.

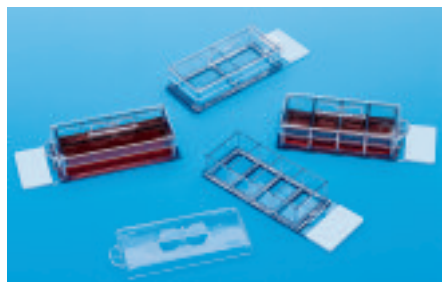
- Removable medium chamber of 1,2,4 and 8-well configuration, attached to non-fluorescent, glass microscope slide (25x75x1.2 mm) with rounded corners using biocompatible adhesive
- Inert hydrophobic well border printed on slide
- Superfrost™ printed writing area
- Treated to ensure excellent cell attachment and growth



Description	Recommended working		Pk	Cat. No.	
	volume (ml)	Growth area (cm ²)			
1-Chamber configuration	2.0-4.5	8.6	16	734-2047	•
2-Chamber configuration	1.0-2.0	4.0	16	734-2048	•
4-Chamber configuration	0.5-1.0	1.7	16	734-2049	•
8-Chamber configuration	0.2-0.5	0.7	16	734-2050	•

Chamber Slides, Lab-Tek™ II CC2™

Nunc™



1.0 Borosilicate coverglass with coated growth surface, PS medium chamber, sterile

These chamber slides have a chemically coated growth surface on the glass slide which mimics polylysine, providing binding sites optimal for fastidious cells such as neurons.

- Growth surface remains stable without refrigeration
- Light blue frosted writing area for clear identification
- Slide separator (used to lift the medium chamber from the slide) included in each pack



Description	Recommended working		Pk	Cat. No.	
	volume (ml)	Growth area (cm ²)			
1-Chamber configuration	2.0-4.5	8.6	16	734-2051	
2-Chamber configuration	1.0-2.0	4.0	16	734-2052	
4-Chamber configuration	0.5-1.0	1.7	16	734-2053	•
8-Chamber configuration	0.2-0.5	0.7	16	734-2054	•

Cell Culture

Cell Culture – Chamber Slides

Chambered Cover Glasses, Lab-Tek™
Nunc™



1.0 Borosilicate coverglass, PS medium chamber, sterile

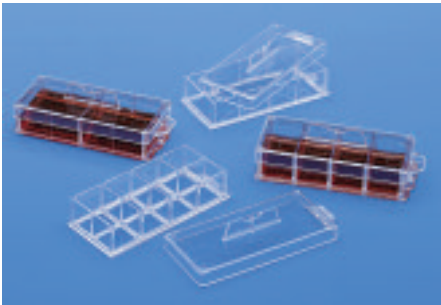
These chamber slides are designed for confocal image analysis.

- Optimal for high power inverted microscopic viewing
- Medium chamber is not removable



Recommended working				
Description	volume (ml)	Growth area (cm²)	Pk	Cat. No.
1-Chamber	2.5-4.5	9.4	16	734-2056
2-Chamber	1.2-2.0	4.2	16	734-2058
4-Chamber	0.5-0.9	1.8	16	734-2060
8-Chamber	0.2-0.4	0.8	16	734-2062

Chambered Cover Glasses, Lab-Tek™ II
Nunc™



1.5 Borosilicate coverglass, PS medium chamber, sterile

For use with 1, 2, 4 and 8-well configuration Lab-Tek™ II Chamber Slides.

- Excellent for confocal image analysis
- Optimal for high power inverted microscope viewing
- Chambered coverglass medium chamber is not removable



Recommended working				
Description	volume (ml)	Growth area (cm²)	Pk	Cat. No.
1-Chamber configuration	2.0-4.5	8.6	16	734-2055
2-Chamber configuration	1.0-2.0	4.0	16	734-2057
4-Chamber configuration	0.5-1.0	1.7	16	734-2059
8-Chamber configuration	0.2-0.5	0.7	16	734-2061

Flasks on Slides
Nunc™



Glass Flaskette, PS SlideFlask, sterile

For cell culture directly on a microscope slide. Ideal for karyotyping of cells, single cell autoradiography, and single cell immuno-fluorescence.

- Glass flaskette CE marked
- PS SlideFlask Nunclon™ certified
- SlideFlask is ultrasonically welded to the slide, and individually leak tested

Dimensions: Flaskette 20x52 mm; SlideFlask 18x50 mm



Recommended working				
Description	volume (ml)	Growth area (cm²)	Pk	Cat. No.
Flaskette, glass	2.5-5.0	10	16	732-2609
SlideFlask, PS	2.5-5.0	9	50	734-2107

Coverslips, Thermanox™

Nunc™



Safe, easy to handle coverslips, 0.2 mm thickness, which remain flat during normal use.

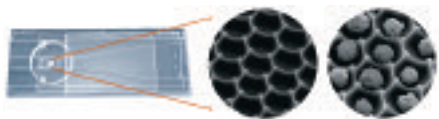
- Resistant to commonly used solvents
- Autofluorescent in the range 380 to 545 nm
- Surface treatment on one side for optimal cell attachment and growth



Description	Pk	Cat. No.
Rectangular coverslips, 10.5x22 mm, for 8-well multidish	500	734-2115
Rectangular coverslips, 22x60 mm, for 4-well multidish	500	734-2116
Rectangular coverslips, 24x30 mm	500	734-2154
Round coverslips, Ø 13 mm, for 24-well multidish	500	734-2117
Round coverslips, Ø 15 mm	500	734-2172
Round coverslips, Ø 22 mm	500	734-2173
Round coverslips, Ø 25 mm, for 6-well multidish	500	734-2118

Microscope Slides, LiveCell Array™

Nunc™



Disposable, sterile microscope slides with an embedded, transparent array of picowells

LiveCell Array™ is a slide-based tool for real-time study of individual living cells, adhering and non-adhering, within heterogeneous populations.

- Enables multiple functional assays on living cells followed by post-fixation studies on the same cells
- Staining, rinsing and perfusion do not displace cells
- Compatible with standard microscopes
- Image Analysis Software designates and addresses to each cell

LiveCell is a licensed trademark of Molecular Cytomics Inc.



LiveCell Array™ Slides, 1 per case

Description	Pk	Cat. No.
Slide with 15 µm well	1	734-2198
Slide with 20 µm well	1	734-2200
Slide with 100 µm well	1	392-0010
Slide with 250 µm well	1	734-2202

LiveCell Array™ Slides, 5 per case

Description	Pk	Cat. No.
Slide with 15 µm well	5	734-2199
Slide with 20 µm well	5	392-0008
Slide with 100 µm well	5	392-0009
Slide with 250 µm well	5	734-2203

LiveCell Array™ Apoptosis Kits, 5 slides plus reagents

Description	Pk	Cat. No.
Slide with 15 µm well	5	734-2204
Slide with 20 µm well	5	734-2205
Slide with 100 µm well	5	734-2206
Slide with 250 µm well	5	734-2207

Cell Culture

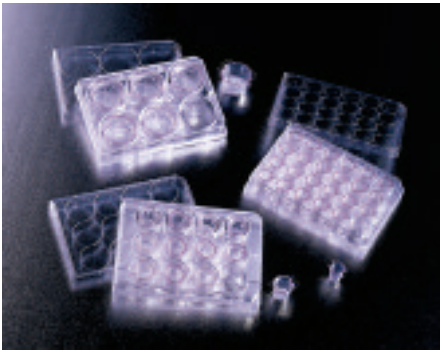
Cell Culture – Chamber Slides

LiveCell Array™ Cell Surface Marker Kits, 5 slides plus reagents

Description	Pk	Cat. No.
Slide with 15 µm well	5	734-2208
Slide with 20 µm well	5	734-2209
Slide with 100 µm well	5	734-2210
Slide with 250 µm well	5	734-2211

BD Falcon™ Cell Culture Inserts

BD Biosciences



PET membranes in PET housing, sterile

BD Falcon™ Cell Culture Inserts are track-etched, low-protein binding, PET membranes with a smooth surface and defined cylindrical pores that transverse the membrane. Available in a wide range of configurations (6-, 12- and 24-well) and a broad selection of pore sizes (0.4, 1.0, 3.0 and 8.0 µm). Larger pore-size membranes are most suitable for investigating chemotaxis, invasion and migration; transparent membranes for visualisation of cells by light microscopy; and high pore-density membranes for maximum diffusion when studying transport, secretion or drug uptake.

- Non-tissue culture treated insert housing prevents growth of cells on the inert walls
- Hanging design facilitates pipetting and allows for co-culture
- Suitable for use with BD Falcon™ Cell Culture Insert Companion Plates
- Supplied in individual blister packs

Transparent PET membrane, 0.4 µm pore size, 1.6x10⁶ pores/cm²

Description	Pk	Cat. No.
Inserts for 6-well plates	48	734-0032
Inserts for 12-well plates	48	734-0051
Inserts for 24-well plates	48	734-0036

High density, translucent PET membrane, 0.4 µm pore size, 1.0x10⁸ pores/cm²

Description	Pk	Cat. No.
Inserts for 6-well plates	48	734-0061
Inserts for 12-well plates	48	734-0062
Inserts for 24-well plates	48	734-0063

Transparent PET membrane, 1.0 µm pore size, 1.6x10⁶ pores/cm²

Description	Pk	Cat. No.
Inserts for 6-well plates	48	734-0040
Inserts for 12-well plates	48	734-0041
Inserts for 24-well plates	48	734-0042

Transparent PET membrane, 3.0 µm pore size, 8.0x10⁵ pores/cm²

Description	Pk	Cat. No.
Inserts for 6-well plates	48	734-0033
Inserts for 12-well plates	48	734-0052
Inserts for 24-well plates	48	734-0037

High density, translucent PET membrane, 3.0 µm pore size, 2.0x10⁶ pores/cm²

Description	Pk	Cat. No.
Inserts for 6-well plates	48	734-0034
Inserts for 12-well plates	48	734-0060
Inserts for 24-well plates	48	734-0397

Transparent PET membrane, 8.0 µm pore size, 1x10⁵ pores/cm²

Description	Pk	Cat. No.
Inserts for 6-well plates	48	734-0035
Inserts for 12-well plates	48	734-0053
Inserts for 24-well plates	48	734-0038

BD BioCoat™ Collagen I and Collagen IV Cell Culture Inserts

BD Biosciences

BD Falcon™ Cell Culture Inserts coated with collagen

Cell culture on permeable membranes permits diffusion of media components to both apical and basolateral cell surfaces similar to the in vivo process. Membranes with extracellular matrix (ECM) further improve in vitro cell culture systems by providing cells with a vital component of their microenvironment in vivo. Typical applications for BD BioCoat™ Cell Culture Inserts include promotion of epithelial cell polarity; differentiation of a variety of cell types; transport and permeability studies; transendothelial migration, tumour cell invasion assays, in vitro toxicology; and co-culture studies.

Delivery Information: Supplied packaged ready-to-use in BD Falcon™ Companion Cell Culture Plates. Pack quantity refers to the total number of cell culture inserts supplied.

For further details about the full range of BD BioCoat™ Cell Culture Inserts please contact your local VWR representative.

BD BioCoat™ collagen I cell culture inserts

Description	Pk	Cat. No.
Four 6-well plates, 0.4 µm	24	734-0131
Four 6-well plates, 1.0 µm	24	734-0222
Four 6-well plates, 3.0 µm	24	734-0195

BD BioCoat™ collagen IV cell culture inserts

Description	Pk	Cat. No.
Two 24-well plates, 1.0 µm	24	734-0227

BD Falcon™ Cell Culture Insert Companion Plates

BD Biosciences

PS, tissue culture-treated, sterile, non-pyrogenic, with lid

Specifically designed for use with BD Falcon™ or BD BioCoat™ Cell Culture Inserts, so that evaporation and contamination due to improper lid fit is eliminated.

In the "Feeding Position" pipette access is improved for fluid handling on the basolateral side. In the "Incubation Position" cell culture inserts remain locked in position in their companion plate wells.

- Reagents can be added quickly and consistently for timed experiments
- Aspiration from the well is easier, reducing the risk of contamination
- Media cannot wick up between the insert and the well wall
- Low-evaporation lid reduces evaporation and contamination

Note: May be used with or without cell culture inserts

Description	Pk	Cat. No.
6-Well companion plate (deep well)	4	734-1095
6-Well companion plate	50	734-0065
12-Well companion plate	50	734-0066
24-Well companion plate	50	734-0067



BD BioCoat™ Matrigel™ Invasion Chambers

BD Biosciences

An in vitro system for assessing the invasive potential of both malignant and normal cells

BD BioCoat™ Matrigel™ Invasion Chambers enable studies of metastatic potential of tumour cells; expression of matrix metalloproteinase on the surface of invasive tumour cells; inhibition of metastasis by ECM components or antineoplastic drugs (i.e. Taxol®); altered expression of cell surface proteins in metastatic cells; and invasion of normal cells, such as embryonic stem cells, cytotrophoblasts, and fibroblasts as well as of multiple cell lines.

The BD BioCoat™ Matrigel™ Invasion Chamber is an in vitro system for the study of cell invasion through the basement membrane. It consists of BD Falcon™ Cell Culture Inserts containing an 8.0 µm pore-size PET membrane coated with a uniform layer of BD Matrigel™ Matrix.

The BD BioCoat™ Tumour Invasion System is an in vitro system for the study of tumour cell invasion through the basement membrane. It consists of BD Falcon™ FluoroBlok Multiwell Insert Plates containing an 8.0 µm pore size FluoroBlok membrane coated with a uniform layer of BD Matrigel™ Basement Membrane Matrix. The BD Matrigel™ Matrix occludes the pores of the FluoroBlok membrane, blocking non-invasive cells from migrating through the membrane.

Cell Culture

Cell Culture - Inserts

- Proven biological performance using BD FluoroBlok PET membrane coated with BD Matrigel™ Matrix
- Allows for rapid and reproducible quantitation of tumour cell invasion in vitro
- Increase throughput for tumour cell invasion assays
- Allows automation of assays with simplified and non-destructive fluorescence detection
- Saves time and labour screening for prospective anti-metastatic compounds

Quality control	Tested for the ability to allow invasion of HT-1080 cells, an invasive human fibrosarcoma cell line, and to exclude invasion of 3T3 cells, a non-invasive mouse fibroblast cell line Tested and found negative for bacteria and fungi
Storage and stability	Store at -20 °C in original packaging. Stable for at least 3 months at -20 °C

BD BioCoat™ Matrigel™ Invasion Chambers

Description	Pk	Cat. No.
8.0 µm Inserts in four 6-well plates	24	734-1048
8.0 µm Inserts in two 24-well plates	24	734-1047

BD BioCoat™ Growth Factor Reduced (GFR) Matrigel™ Invasion Chambers

Description	Pk	Cat. No.
8.0 µm Inserts in two 24-well plates	24	734-1049

BD BioCoat™ 24-Multiwell Tumour Invasion System

Description	Pk	Cat. No.
8.0 µm Multiwell insert plate in one 24-well plate	1	734-1024
8.0 µm Multiwell insert plate in five 24-well plates	5	734-1025

BD BioCoat™ 96-Multiwell Tumour Invasion System

Description	Pk	Cat. No.
8.0 µm Multiwell insert plate in one 96-well plate	1	392-2500
8.0 µm Multiwell insert plate in five 96-well plates	5	392-2501

BD BioCoat™ Angiogenesis System

BD Biosciences

Angiogenesis is the development of new blood vessels from pre-existing ones. This process is essential for normal growth and homeostasis. However, angiogenesis becomes altered during certain disease states, which results in excessive or insufficient blood vessel formation. Diseases such as cancer, diabetic retinopathy and rheumatoid arthritis are characterised by excessive angiogenesis.

The BD BioCoat™ Angiogenesis Systems facilitate investigation of compound effects on endothelial cell invasion, migration, and tubulogenesis. The availability of these standardised assays has facilitated a better understanding of the molecular mechanism of angiogenesis and simplified the routine use of cell-based assays for screening of anti- and pro-angiogenic compounds.

BD™ Human Umbilical Vein Endothelial Cells (HUVEC-2) are derived from single donors and cryopreserved at passage number 2. HUVEC-2 cells have been pre-qualified to assure a robust migratory response to angiogenic factors such as VEGF and FBS. Single donor primary HUVEC-2 cells are suitable for use in combination with BD BioCoat™ Angiogenesis Assay Systems to provide relevant models for angiogenesis (e.g., cardiovascular, vascular, and wound healing) and cancer research. BD™ Human Umbilical Vein Endothelial Cells have been qualified for use in BD BioCoat™ Angiogenesis Endothelial Cell Migration assays and may be used in BD BioCoat™ Endothelial Cell Invasion and Tube Formation assays.

- Address key steps in the angiogenesis process using standardised cell-based assays
- Increase throughput with screening-compatible formats and data acquisition options
- Obtain human umbilical vein endothelial cells pre-qualified for use in the endothelial cell migration assay

Quality control	<p>All BD BioCoat™ Angiogenesis Systems are tested for the ability to support HUVEC tubule formation, determined by tubule length, and measured by automated image analysis. All lots of this product are tested and found negative for bacteria and fungi.</p> <p>HUVEC-2 cells are tested for migratory performance at a minimum of eight population doublings; positive immunohistochemical staining for von Willebrand factor and CD31 antigen; negative immunohistochemical staining to a-actin; positive Dil-Ac-LDL uptake; and negative mycoplasma, HIV-1, hepatitis B and C, bacteria, yeast and fungi</p>
Storage and stability	<p>BD BioCoat™ Angiogenesis Systems are stable for at least three months from the date of shipping when stored at -20 °C.</p> <p>HUVEC-2 cells should be stored in liquid nitrogen</p>

BD BioCoat™ Angiogenesis System: Endothelial Cell Invasion

For evaluation of endothelial cell invasion using real-time fluorescence detection in a simplified and reproducible manner.

Description	Pk	Cat. No.
One 24-Multiwell insert plate	1	734-1018
Five 24-Multiwell insert plates	5	734-1019

BD BioCoat™ Angiogenesis System: Endothelial Cell Migration

A quantitative and reproducible in vitro model system for examining the effects of prospective compounds on endothelial cell migration.

Description	Pk	Cat. No.
One 24-Multiwell insert plate	1	734-1020
Five 24-Multiwell insert plates	5	734-1021
One 96-Multiwell insert plate	1	734-1118
Five 96-Multiwell insert plates	5	392-2504

BD BioCoat™ Angiogenesis System: Endothelial Cell Tube Formation

An optimised system for screening compounds that modulate endothelial cell tubulogenesis, which saves time and improves reproducibility.

Description	Pk	Cat. No.
One 96-well black/clear bottom Optilux™ microplate	1	734-1022
Five 96-well black/clear bottom Optilux™ microplates	5	734-1023

BD™ Human Umbilical Vein Endothelial Cells

Pre-qualified primary endothelial cells ensure assay performance and data reproducibility.

Description	Pk	Cat. No.
HUVEC-2, >5x10 ⁵ cells	1	734-1120

Cell Culture Inserts

Nunc™



For cultivation of most cell types, without matrix coating. Membranes are thermally welded to the polystyrene upper structure. Inserts with 0.02 µm Anopore™ membrane have maximum clarity for microscopy, are non-autofluorescent and highly porous. Polycarbonate membranes in larger pore sizes are adaptable to many uses in cell culture including transport studies, toxicity tests, chemotaxis studies and electron microscopy. Both membrane types are transparent when wet and are suitable for phase contrast and Normanski Optic Systems.

- Treated and quality controlled for cell culture
- Excellent cell attachment and growth
- Non-toxic and resistant to most solvents
- Low non-specific binding
- Polycarbonate membrane inserts also available pre packed in multidishes

Anopore™ is a trademark of Whatman Scientific



Sampling and Cell Culture

Cell Culture

Cell Culture - Inserts

Polycarbonate membrane, 0.4 µm pore size, 1.5x10⁸ pores/cm²

Description	Recommended working volume (ml)	Culture area (cm ²)	Pk	Cat. No.
Inserts for 6-well multidishes, Ø 25 mm	1.75	4.2	48	734-2016
Inserts pre-packed in 6-well multidishes, 20x25 mm	1.5	3.14	24	734-2240
Inserts pre-packed in 12-well multidishes, 12x18 mm	1.1	1.13	48	734-2232
Inserts pre-packed in 24-well multidishes, 8x13 mm	0.5	0.47	48	734-2239
Inserts pre-packed in 6-well multidishes, 23x34 mm	1.75	4.1	24	734-2235
Inserts for 24-well multidishes, Ø 10 mm	0.5	0.5	48	734-2015

Polycarbonate membrane, 3.0 µm pore size, 3x10⁶ pores/cm²

Description	Recommended working volume (ml)	Culture area (cm ²)	Pk	Cat. No.
Inserts for 6-well multidishes, Ø 25 mm	1.75	4.2	48	734-2020
Inserts pre-packed in 6-well multidishes, 23x34 mm	1.75	4.1	24	734-2236
Inserts for 24-well multidishes, Ø 10 mm	0.5	0.5	48	734-2019
Inserts pre-packed in 6-well multidishes, 20x25 mm	1.5	3.14	24	734-2230
Inserts pre-packed in 12-well multidishes, 12x18 mm	1.1	1.13	48	734-2233
Inserts pre-packed in 24-well multidishes, 8x13 mm	0.5	0.47	48	734-2228

Polycarbonate membrane, 8.0 µm pore size, 10⁵ pores/cm²

Description	Recommended working volume (ml)	Culture area (cm ²)	Pk	Cat. No.
Inserts for 6-well multidishes, Ø 25 mm	1.75	4.2	48	734-2022
Inserts pre-packed in 6-well multidishes, 23x34 mm	1.75	4.1	24	734-2237
Inserts for 24-well multidishes, Ø 10 mm	0.5	0.5	48	734-2021
Inserts pre-packed in 6-well multidishes, 20x25 mm	1.5	3.14	24	734-2231
Inserts pre-packed in 12-well multidishes, 12x18 mm	1.1	1.13	48	734-2234
Inserts pre-packed in 24-well multidishes, 8x13 mm	0.5	0.47	48	734-2229

Anopore™ membrane, 0.02 µm pore size, 10¹¹ pores/cm²

Description	Recommended working volume (ml)	Culture area (cm ²)	Pk	Cat. No.
Inserts for 6-well multidishes, Ø 25 mm	1.75	4.2	48	734-2169
Inserts for 24-well multidishes, Ø 10 mm	0.5	0.5	48	734-2077

Anopore™ membrane, 0.2 µm pore size, 10⁹ pores/cm²

Description	Recommended working volume (ml)	Culture area (cm ²)	Pk	Cat. No.
Inserts for 6-well multidishes, Ø 25 mm	1.75	4.2	48	734-2014
Inserts for 24-well multidishes, Ø 10 mm	0.5	0.5	48	734-2013
Inserts for 8-well strip of MicroWell plate	0.06	0.08	15	732-2600

All Nunc Cell Culture Inserts: Recommended working volume, ml = in addition to normal well working volume

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Drosophila Stock Bottles



PP round or square bottom or PE square bottom bottles

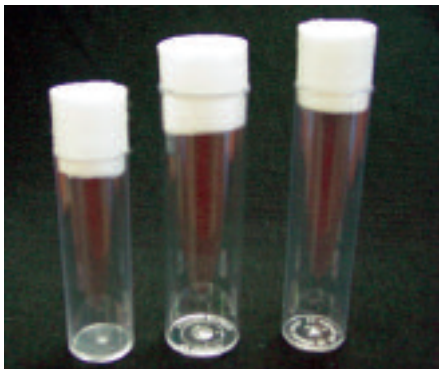
- Thin wall design for excellent visibility
- Pliable top for easy removal of paper lid
- Moulded-in food level graduation marks

Bottle 734-1259 features a wider edge for a more secure paper cap fit. Bottle 734-1250 has a moulded indent near the bottom, which helps to secure media.

PP bottles are autoclavable, PE bottles are not.

Description	Capacity		Cat. No.	
	(ml)	Pk		
PP square bottom	170	500	734-1260	•
PE square bottom	170	500	734-1261	
PP square bottom with wider edge	170	500	734-1259	
PP round bottom	170	500	734-1249	•
PP round bottom with moulded indent	225	250	734-1250	•

Drosophila Vials



Available in three materials and two packaging formats. Ideal for growing drosophila or other insects. Straight wall shell design allows for easy racking, filling and plugging.

- PP vials are virtually unbreakable, economically priced and are autoclavable
- PS vials are clear, and provide a safe and economical alternative to glass vials
- K-Resin co-polymer vials offer glasslike clarity, are scratch resistant and are ideal for microscopic examination; they are more flexible than PS vials, which makes them excellent for freezing and shipping specimens

PS and K-Resin vials are not autoclavable.

Sizes: Narrow 25 x 95 mm; wide 28.5 x 95 mm; short 24 x 75 mm

Bulk packed vials

Bulk packed vials are layered and are open-end orientated for convenient handling.

Description	Pk	Cat. No.	
PP vials, narrow	500	734-1244	
PP vials, wide	500	734-1252	•
PS vials, narrow	500	734-1254	•
PS vials, wide	500	734-1255	•
PS vials, narrow, short	500	734-1257	•
K-Resin vials, narrow	500	734-1246	
K-Resin vials, wide	500	734-1248	

Tray packed vials

Shrink-wrapped in a 10x10 row configuration with dividers between vials.

Description	Pk	Cat. No.	
PP vials, narrow	500	734-1253	•
PP vials, wide	500	734-1251	•
PS vials, narrow	500	734-1243	
PS vials, wide	500	734-1256	
PS vials, narrow, short	500	734-1258	
K-Resin vials, narrow	500	734-1245	
K-Resin vials, wide	500	734-1247	

Vial and dividers

Cardboard trays with cell dividers; 254x254 mm row configuration for narrow or wide diameter shell vials.

Cell Culture

Cell Culture - Bottles and Tubes

Description	Pk	Cat. No.
Trays and dividers for narrow vials	50	734-1237
Trays and dividers for wide vials	50	734-1240
Dividers only for narrow vials	50	734-1238
Trays only for narrow vials	50	734-1239
Dividers only for wide vials	50	734-1241
Trays only for wide vials	50	734-1242

BD Falcon™ Sterile Containers

BD Biosciences



PP, sterile, with PE lid

Convenient, single-use containers for collection, transport and storage of a wide variety of specimens.

- Moulded-in graduations for easy measurement
- Inert and chemically resistant to commonly used laboratory reagents at room temperature



Description	Pk	Cat. No.
Sterile container, 110 ml, with lid	100	391-0020
Sterile container, 220 ml, with lid	100	391-0023

Erlenmeyer Flasks



PC, clear, narrow mouth

Ideal for shaker and suspension cell culture applications.

- Sterile and autoclavable
- Safe and shatterproof
- Chemically inert

Flasks are available with baffled or flat bottoms. Each flask supplied with two caps (one standard seal, one vented). Replacement caps are also available.

Packaging: Individually packed.

Version	Capacity (ml)	Pk	Cat. No.
Baffled	125	24	215-2214
	250	12	215-2216
	500	12	215-2218
Flat	125	24	215-2220
	250	12	215-2222
	500	12	215-2224

Replacement screwcaps, blue, PP size 38-430

Description	Pk	Cat. No.
Standard cap, blue	48	215-2227
	96	215-2207
Septum cap, blue	96	215-2212
Vented cap with PTFE membrane, sterile	72	215-2225
	48	215-2226





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Erlenmeyer Flasks

Corning



Optically clear PC

Corning® baffled and plain Erlenmeyer flasks are ideal for shaker culture applications and storage.

- Baffled or plain bottom options in all sizes (125 ml to 3 L)
- Moulded-in graduations for accuracy
- Vent cap option for continuous gas exchange while ensuring sterility and preventing leakage
- Individually packaged and radiation sterilised for ease of use
- Certified non pyrogenic



Baffled bottom Erlenmeyer Flasks

Type	Capacity (ml)	Neck	Cap	Pk	Cat. No.
Erlenmeyer flask, baffled	125	Ø 26 mm	plug-seal	50	734-4200
Erlenmeyer flask, baffled	125	Ø 26 mm	vented	50	734-4201
Erlenmeyer flask, baffled	250	Ø 31 mm	plug-seal	50	734-4202
Erlenmeyer flask, baffled	250	Ø 31 mm	vented	50	734-4203
Erlenmeyer flask, baffled	500	Ø 43 mm	plug-seal	25	734-4204
Erlenmeyer flask, baffled	500	Ø 43 mm	vented	25	734-4197
Erlenmeyer flask, baffled	1 L	Ø 43 mm	plug-seal	25	734-4198
Erlenmeyer flask, baffled	1 L	Ø 43 mm	vented	25	734-4199
Erlenmeyer flask, baffled	2 L	Ø 48 mm	vented	6	734-1905
Erlenmeyer flask (Fernbach design), baffled	3 L	Ø 70 mm	vented	4	734-1903

Plain bottom Erlenmeyer Flasks

Type	Capacity (ml)	Neck	Cap	Pk	Cat. No.
Erlenmeyer flask	125	Ø 26 mm	plug-seal	50	734-1832
Erlenmeyer flask	125	Ø 26 mm	vented	50	734-1885
Erlenmeyer flask	250	Ø 31 mm	plug-seal	50	734-1820
Erlenmeyer flask	250	Ø 31 mm	vented	50	734-1886
Erlenmeyer flask	500	Ø 43 mm	plug-seal	25	734-1833
Erlenmeyer flask	500	Ø 43 mm	vented	25	734-1887
Erlenmeyer flask	1 L	Ø 43 mm	plug-seal	25	734-1888
Erlenmeyer flask	1 L	Ø 43 mm	vented	25	734-1889
Erlenmeyer flask	2 L	Ø 48 mm	vented	6	734-1904
Erlenmeyer flask (Fernbach design)	3 L	Ø 70 mm	vented	4	734-1902

Aseptic Transfer Caps

Transfer caps with two ports. One port ends in a 0.2 µm Acro 50 mm disc and the other port is C-Flex Tubing ending in either a male luer lock or a male polycarbonate quick connect.

- Diptube reaches all the way to the bottom of the flask for easy aseptic transfer of liquid
- Suitable for 1L, 2L and 3L plastic Erlenmeyer flasks

Description	Pk	Cat. No.
43 mm aseptic transfer cap for 1 L flask, 1/8" diptube, 0.2 µm vent, male luer lock	5	734-4209
43 mm aseptic transfer cap for 1 L flask, 1/4" diptube, 0.2 µm vent, male PC connector	5	734-4210
48 mm aseptic transfer cap for 2 L flask, 1/8" diptube, 0.2 µm vent, male luer lock	6	734-4211
48 mm aseptic transfer cap for 2 L flask, 1/4" diptube, 0.2 µm vent, male PC connector	6	734-4212
70 mm aseptic transfer cap for 3 L flask, 1/8" diptube, 0.2 µm vent, male luer lock	4	734-4213
70 mm aseptic transfer cap for 3 L flask, 1/4" diptube, 0.2 µm vent, male PC connector	4	734-4214

Replacement Caps

PP

Cell Culture

Cell Culture - Bottles and Tubes

Replacement caps for Corning® 2L and 3L Erlenmeyer flasks are available separately. They are supplied sterile and individually packaged.

Description	Pk	Cat. No.
Vent cap, 48 mm, for 2L flask	24	734-1215
Vent cap, 70 mm, for 3L flask	24	734-1216
Flat cap, 48 mm, for 2L flask	24	734-4194
Flat cap, 70 mm, for 3L flask	24	734-4195

Media Bottles with Cap



PC, autoclavable, narrow mouth bottles with standard PP caps

VWR Collection Media Bottles are an ideal replacement for all borosilicate glass bottles. They are specifically designed for every laboratory application requiring terminal sterilisation (autoclaving), storage, transportation, and production of laboratory biological fluids. The bottles are available in square and round shapes to accommodate various packaging needs.

The closure system is guaranteed leak-proof and the seal ring allows for convenient shrink-wrapping of the caps. Each bottle is carefully produced and quality controlled for uniform wall thickness, clarity, graduation, and leak-proof closure.

Optional septum cap or vented cap with PTFE membrane is also available.

- Ideal for terminal sterilisation
- Safe and shatterproof
- Chemically inert

Description	Thread	Pk	Cat. No.
Clear, square, 1000 ml	38-430	12	215-2206
Clear, square, 500 ml	38-430	12	215-2205
Clear, square, 125 ml	38-430	24	215-2203
Clear, round, 1000 ml	38-430	12	215-2211
Clear, round, 500 ml	38-430	12	215-2210
Clear, round, 125 ml	38-430	24	215-2204
Amber, square, 1000 ml	38-430	12	215-2202
Amber, square, 500 ml	38-430	12	215-2201
Amber, square, 125 ml	38-430	24	215-2200
Amber, round, 1000 ml	38-430	12	215-2209
Amber, round, 500 ml	38-430	12	215-2208

Caps, PP

Description	Thread	Pk	Cat. No.
Standard cap, blue	38-430	48	215-2227
Standard cap, blue	38-430	96	215-2207
Septum cap, blue	38-430	96	215-2212
Vented cap with PTFE membrane, sterile	38-430	72	215-2225
Vented cap with PTFE membrane, sterile	38-430	48	215-2226

Media Bottles, Square, Sterile

Nalgene



PETG bottle with HDPE screw closure

An inexpensive alternative to glass bottles for storage and transport of media, these heavy-walled, square, media bottles are transparent and graduated.

- Leak-proof, break-resistant and durable
- Reduced permeability to carbon dioxide and oxygen
- Bottles and closures are radiation sterilised and non-pyrogenic to eliminate costly washing, depyrogenation and autoclaving steps
- Heat-shrink band around closure and neck provides tamper-evident seal
- 2L size has moulded in hand grips and a 53 mm white closure

Capacity (ml)	Cap size	Pk	Cat. No.	
30	20 mm	96	215-6700	•
60	24 mm	96	391-7122	•
125	38-430	48	391-7123	•
250	38-430	48	391-7124	•
500	38-430	24	391-7125	•
1000	38-430	24	391-7126	•
2000	53B	12	391-7127	•

Culture Media Bottles, Square, Sterile

Nalgene



PETG

An inexpensive alternative to glass bottles for storage and transport of media. Available with or without a natural HDPE screw cap closure. The caps for the 30-1000 ml bottles are a natural off-white colour. The cap for the 2000 ml bottle is white. Bottles and closures are not autoclavable. Packaged in shrink-wrapped trays.

- Leak-proof, break-resistant and durable
- Transparency and reduced permeability to carbon dioxide and oxygen allow media storage up to 6 months
- Bottles and closures are radiation sterilised and non-pyrogenic



Description	Capacity (ml)	WxDxH (mm)	Neck I-Ø (mm)	Pk	Cat. No.
Bottles with screw caps	30	38x38x64	14	280	216-0306
	60	41x41x83	18	200	216-0307
	125	54x54x110	28	96	216-0308
	250	61x61x146	28	60	216-0309
	500	74x74x177	28	40	216-0310
	1000	94x94x220	28	24	216-0311
	2000	116x116x171	39	12	216-0312
Bottles without screw caps	30	38x38x64	14	280	216-0379
	60	41x41x83	18	200	216-0380
	125	54x54x110	28	96	216-0381
	250	61x61x146	28	60	216-0382
	500	74x74x177	28	40	216-0383
	650	82x82x180	28	24	216-0384
	1000	94x94x220	28	48	216-0385

Media Bottles, Square, Sterile

Wheaton



PET bottle with white PE cap

These bottles offer the clarity of glass, the strength of plastic and a space saving design.

- Tested for pH stability, temperature durability, cloning efficiency and cytotoxicity
- No-drip pour lip allows cleaner, faster and easier pouring
- Permanent in-mould graduations provide volume determination at a glance
- Lightweight for more economical shipping and handling
- 20% headspace for additives

Delivery Information: Supplied with caps pre-attached, sterile and shrink-wrapped.



Capacity (ml)	Dimensions (mm)	Pk	Cat. No.
125	53x53x99	48	215-8320
500	75x75x175	24	215-8321

Cell Culture

Cell Culture - Bottles and Tubes

Storage Bottles, Corning® Easy Grip Style

Corning



PS

Disposable polystyrene bottles for storage of media, buffers and other aqueous solutions



- Low profile, easy grip style has sides that facilitate handling
- Plug seal caps (45 mm) provide an airtight seal and help minimise the risk of contamination
- Bottles can be used with Corning® Vacuum Filter Systems
- Sterile, certified non pyrogenic

Description	Capacity (ml)	Cap size (mm)	Pk	Cat. No.
Corning® Easy Grip storage bottles	150	45	24	734-1897
Corning® Easy Grip storage bottles	250	45	24	734-1824
Corning® Easy Grip storage bottles	500	45	24	734-1825
Corning® Easy Grip storage bottles	1000	45	24	734-1847

Caps for Test Tubes, Safe-T-Flex



548-0726

Safe-T-Flex caps feature a unique, flexible, over-locking design, locking securely on the outside of the tube lip and removable by one hand. A tight seal ensures sample integrity and prevents spillage or evaporation of serum samples. This special seal protects against the aerosols of highly infectious organisms such as TB and the HTLV-III virus. They are colour-coded for easy specimen identification and to help guard against cross-contamination. The top of each cap can also be numbered or labelled with indelible ink. Self-locking cap holds firmly in any position and keeps contents secure while in transit. Liquid-tight seal withstands centrifugation, agitation, refrigeration, and freezing.



- Colour coded self-locking test tube caps prevent spillage or loss of samples
- Fit all varieties of blood collecting and disposable culture tubes

Ordering Information: caps are packaged in bags of 1000.

Description	Colour	Pk	Cat. No.
Safe-T-Flex caps for 10 mm blood collecting and culture tubes	transparent	1000	548-0720
	red	1000	548-0733
	lilac	1000	548-0731
	green	1000	548-0735
	blue	1000	548-0728
	grey	1000	548-0737
	yellow	1000	548-0734
Safe-T-Flex caps for 12 mm culture tubes and 13 mm blood collecting tubes	transparent	1000	548-0711
	red	1000	548-0722
	lilac	1000	548-0716
	green	1000	548-0713
	blue	1000	548-0718
	grey	1000	548-0725
	yellow	1000	548-0727
Safe-T-Flex caps for 13 mm culture tubes	transparent	1000	548-0710
	red	1000	548-0723
	lilac	1000	548-0719
	green	1000	548-0724
	blue	1000	548-0714
	grey	1000	548-0732
	yellow	1000	548-0730

Description	Colour	Pk	Cat. No.	
Safe-T-Flex caps for 16 mm blood collecting and culture tubes	transparent	1000	548-0712	•
	red	1000	548-0717	
	lilac	1000	548-0715	
	green	1000	548-0729	
	blue	1000	548-0721	
	grey	1000	548-0736	
	yellow	1000	548-0726	•

Culture Tubes

Corning



Optically clear PS

Culture tubes with threaded plug seal caps.

- TC treated tubes supplied racked
- Untreated tubes provided bulk packed
- Sterilised by gamma radiation
- Certified non pyrogenic



Chem Prod Description	Pk	Cat. No.
Culture tubes, 16x125 mm, untreated	500	734-1697
Culture tubes, 16x125 mm, TC treated	500	734-1701

BD Falcon™ Conical Tubes with Flip-Top Cap

BD Biosciences



PP, sterile, non-pyrogenic

The BD Falcon™ Conical Tube with Flip-Top Cap is ideal for any research application requiring one-handed operations to open and close the cap. The flip-top design saves time and effort in applications requiring multiple aliquoting, storage and pouring from the same tube, whilst maintaining the same high quality and performance of standard screw cap closures.

- One hand cap manipulation is virtually effortless due to the hinge action of the flip-top cap, and easy-to-read blue graduations on the tube allow rapid volumetric assessment
- Splash guard design of the cap allows opening and closing without risk of splatter
- Click bead ensures a tight and secure seal
- Ambidextrous, with thumb grips on each side of the cap to ensure a sterile opening technique
- Can be centrifuged up to 9400 g



Description	Pk	Cat. No.
Conical tube, 50 ml, with flip-top cap	440	734-1437

BD Falcon™ Cell Culture Tubes

BD Biosciences



Cell Culture Tubes are tissue culture-treated for cell attachment and spreading.

- Compatible with most tube-rolling equipment
- Convenient cross-hatched index mark assists in positioning tubes
- White screw caps distinguish the tissue culture-treated tubes from general purpose tubes and provide capability for both open and closed incubation

Description	Pk	Cat. No.
Cell culture tubes, 16x125 mm	500	734-0015

Cell Culture

Cell Culture - Bottles and Tubes

BD Falcon™ Round Bottomed Test Tubes

BD Biosciences



For reliable containment of laboratory fluid samples.

PP tubes: For applications requiring greater thermal and chemical stability

PS tubes: For procedures requiring high optical clarity

- Widely used and referenced in laboratory protocols
- Dual-position snap caps with heavier gauge walls provide a secure, positive seal
- Specialised tube for flow cytometry applications
- Cell strainer cap tube has a 35um cell strainer mesh incorporated into cap

Description	Pk	Cat. No.	
PS, 12x75 mm, 5ml, snap cap, sterile, 1/pk	500	734-0436	•
PS, 12x75 mm, 5ml, snap cap, sterile, 25/pk	500	734-0445	•
PS, 12x75 mm, 5ml, snap cap, sterile, 125/pk	1000	734-0443	•
PS, 12x75 mm, 5ml, without cap, sterile, 125/pk	1000	734-0442	•
PS, 12x75 mm, 5ml, without cap, non sterile, 1000/pk	1000	734-0000	•
PS, 12x75 mm, 5ml, cell strainer cap, sterile, for flow cytometry, 25/pk	500	734-0001	•
PS, 13x100 mm, 8 ml, screw cap, sterile, 125/pk	1000	734-0439	•
PS, 17x100 mm, 14 ml, snap cap, sterile, 1/pk	500	734-0435	•
PS, 17x100 mm, 14 ml, snap cap, sterile, 25/pk	500	734-0444	•
PS, 17x100 mm, 14 ml, snap cap, sterile, 125/pk	1000	525-0122	•
PS, 17x100 mm, 14 ml, without cap, sterile, 125/pk	1000	734-0989	
PS, 16x125 mm, 16 ml, screw cap, sterile, 1/pk	500	734-0440	
PS, 16x125 mm, 16 ml, screw cap, sterile, 125/pk	1000	734-0986	
PS, 16x150 mm, 19 ml, screw cap, sterile, 1/pk	500	734-0441	
PP, 12x75 mm, 5 ml, snap cap, sterile, 1/pk	500	734-0437	•
PP, 12x75 mm, 5 ml, snap cap, sterile, 25/pk	500	734-0447	•
PP, 12x75 mm, 5 ml, without cap, sterile, 125/pk	1000	525-0123	•
PP, 12x75 mm, 5 ml, without cap, non sterile, 1000/pk	1000	391-0000	•
PP, 17x100 printed mm, 14 ml, snap cap, sterile, 1/pk	500	734-0438	•
PP, 17x100 printed mm, 14 ml, snap cap, sterile, 25/pk	500	734-0446	•
PP, 17x100 printed mm, 14 ml, without cap, sterile, 125/pk	1000	734-0985	

Cell Culture Tubes, Nunclon™Δ

Nunc™



PS with PE caps, sterile

Round bottom tubes with screw or push-on cap for standard cell culture, or flat-sided tubes for the culture of adherent cells.

- Flat side allows easy microscopy - a coverslip can be used in the tube
- Medium retained in the flat-sided tube in the horizontal position
- Excellent optical quality
- Certified surface treatment for optimal cell attachment and growth



Description	Recommended working volume (ml)	Pk	Cat. No.	
Round tubes with screw cap, 100x14 mm	7	600	734-2037	•
Round tubes with push-on cap, 100x13 mm	7	600	734-2036	•
Flat-sided tubes with screw cap, 110x16 mm	3	450	734-2068	•

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Disposable Tubes

Nunc™



PS or PP, non-sterile

PS tubes are suitable for a broad range of applications, whilst PP tubes are particularly useful in serology, where the low adsorption of proteins is of great importance.

- Graduation marked
- PS tubes are transparent
- Stoppers or snap caps sold separately (please enquire for more information)

Description	Capacity		Pk	Cat. No.	
	(ml)	ØxH (mm)			
PS, round bottom	4	11x70	3600	734-0493	•
PP, round bottom	12	15x100	1200	525-0054	•
PS, conical bottom	14	17x110	1800	525-0060	•

Culture Tubes with Screw Neck



Pyrex® borosilicate glass

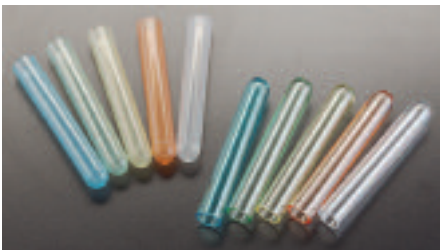
Ideal for use with samples sensitive to leaching from plastic tubes.

- Without screw caps
- High resistance to temperature and chemicals
- Autoclavable at 121 °C



Description	Capacity (ml)	ØxH (mm)	Pk	Cat. No.	
Culture tube, round bottom	7.5	13x100	250	212-7498	
	11.5	16x100	1000	212-7522	
	15	16x125	1000	212-7523	
	19	16x150	1000	212-3418	
	24	20x125	500	212-7525	
	30	20x150	500	212-7526	
Culture tube, flat bottom	17	16x125	250	212-7520	
	29.5	20x145	500	212-7521	

Disposable Culture Tubes



PS or PP

Ideal for use in bacteriology, radioimmunoassay (RIA), coagulation, and other routine laboratory procedures.

- Manufactured without the use of release agents that could cause errors and interference in RIA tests
- Precision moulding ensures uniform size and shape
- PP tubes are translucent, can withstand centrifugation speeds over 3000 g, are suitable for most common acids, solvents and alkalis at room temperature, are almost unbreakable, and can be sterilised at 120 °C
- PS tubes are transparent, will withstand centrifugation speeds up to 1400 g, can tolerate aqueous solutions, mild bases and weak acids (but not organic solvents, aromatic or chlorinated hydrocarbons), and cannot be autoclaved

Cell Culture

Cell Culture - Bottles and Tubes

Description	Capacity		Pk	Cat. No.
	(ml)	ØxH (mm)		
PS culture tubes, blue	5	12x75	1000	212-9603
PS culture tubes, yellow	5	12x75	1000	212-9604
PP culture tubes, natural	5	12x75	1000	212-9599
PP culture tubes, green	5	12x75	1000	212-9600
PP culture tubes, yellow	5	12x75	1000	212-9602
PP culture tubes, orange	5	12x75	1000	212-9601
PS culture tubes, natural	8	13x100	1000	212-9605
PP culture tubes, natural	8	17x100	1000	212-9597
PS culture tubes, natural	14	17x100	1000	212-9596

Bioreactors, Disposable, SuperSpinner D1000

Sartorius Stedim Biotech



The SuperSpinner D 1000 is a fully disposable, pre-assembled and ready-to-use bioreactor for efficient lab scale cultivation of animal cells. The main feature of the SuperSpinner D 1000 is a membrane stirrer, which allows controlled and gentle mixing, bubble-free aeration, and avoids foam generation. Applications include lab scale production of recombinant proteins, monoclonal antibodies and biomass as seed culture (the cultivation broth can be transferred directly from the SuperSpinner D 1000 into a larger bioreactor). Recommended working volume 200-800 ml per flask.

The SuperSpinner D 1000 consists of a cultivation flask and a membrane aeration system that also functions as a stirrer. A hollow-fibre membrane is wound around the stirrer bar, which contains a magnetic core driven by a magnetic drive unit. A membrane gas pump feeds ambient air through a sterile filter into the flask.

- Fully pre-assembled, disposable, sterile and ready-to-use
- High cell densities can be achieved due to the efficient membrane-gassing and agitation system
- A clave adapter, which fits to common laboratory syringes, ensures safe and easy sampling in place during cultivation
- Feeding with supplements is possible at any time by using the spare port, which is covered with a Luer-Lock connector
- Centrifugation of the suspension can be carried out in the cultivation flask, which has a format that fits a wide range of standard rotors

Delivery Information: Each pack contains two SuperSpinner D 1000 bioreactors.

Description	Recommended working		Pk	Cat. No.
	volume			
SuperSpinner D 1000	200-800		2	432-0099

Culture Vessels, Magnetic

Nalgene



Clear, graduated PC vessel, white PP screw caps, Teflon TFE stirring bar and PP/TFE stirring assembly

Specially designed for efficient top-to-bottom mixing at low speed and low shear. This lightweight, break-resistant 1-litre culture vessel is ideal for use on a magnetic stirring plate for small-volume scale-up applications. Two magnetic stirring bars are included: one small (for bacteria) and one large (for mammalian cells).

- Two shoulder access ports for easy removal of samples
- Impeller height is adjustable
- Thermal resistance -135 to +135 °C, autoclavable
- Shatter-proof, with high mechanical strength

Brim capacity: 2.2 l

Closure diameter (top): 63 mm
 Closure diameter (side): 38-430
 Overall height: 266 mm
 Outer diameter: 137 mm
 Overall width (including ports): 190 mm

Description	Pk	Cat. No.
Culture Vessels, Magnetic	1	734-5057

Probe Adapter Closures

Nalgene



PP, white with silicone seal

For use and insertion of 7-14 mm diameter probes into Nalgene® 1 l and 12 l fermenters.

- Seal separates environment from inside of vessel and prevents contamination when using a probe
- Thermal resistance from -135 to +135 °C
- For Nalgene® 1 l and 12 l fermenters

Description	Pk	Cat. No.
Probe adapter closures	2	734-5053



Culture Vessels with Ports, with or without BioTech Mixer

Nalgene



PC culture vessel with white PP closures

Lightweight and break resistant. Features 4 shoulder access ports. Graduated in 0.5 l increments from 3 to 12 l. Made from food grade resins that meet the requirements of USP Class VI. Non cytotoxic.

- Thermal resistance -135 to +135 °C, autoclavable
- Shatter-proof, with high mechanical strength

Brim capacity: 15 l
 Closure diameter (top): 100 mm
 Closure size (side): 38-430
 Overall height: 429 mm
 Outer diameter: 289 mm

Culture vessels with BioTech mixer

The Culture Vessel System with BioTech Mixer consists of a 12 l culture vessel with ports (as described above), 1/8 HP overhead drive BioTech mixer, and a lower assembly comprising 340 mm shaft with 100 mm long axial flow glass filled PP impeller and 63.5 mm wide PP baffle. The BioTech mixer provides variable speed, programmable speed/duration control, clockwise and counter clockwise rotation and is specifically designed for maximum efficiency with system components. Vessel and lower assembly are autoclavable.



Description	Pk	Cat. No.
Culture vessel, 12 l	1	734-5055
Culture vessel system with BioTech mixer, 220V	1	734-5056

Cell Culture

Cell Culture - Larger Scale/Bioprocessing

Cell Culture Flasks, Double Side Arm, Celstir®

Wheaton



Borosilicate glass flask, Teflon® and glass impeller assembly, Teflon® and silicone lined top cap

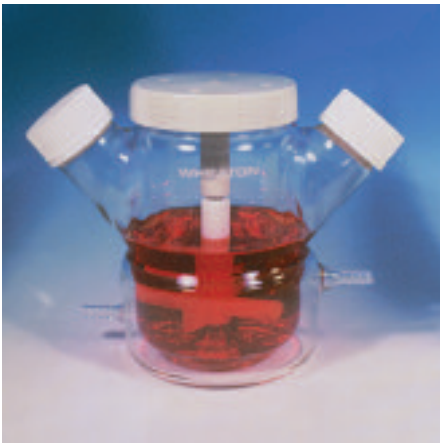
Double side arm Celstir® flasks are ideal for microcarrier and suspension cultures such as insect cells, hybridomas and adapted cell lines.

- Adjustable paddle blade impeller allows better mixing
- Impeller does not protrude through the top cap, thereby maximising incubator space and reducing the risk of contamination
- Addition of the bottom dimple to flasks 125 ml and larger improves circulation and reduces the accumulation of cells in the centre of the flask
- Flasks 500 ml or larger have a 45 mm side arm to be used as an air vent, media inlet or outlet, inoculation port, pH probe inlet, or other application

Volume (ml)	ØxH (mm)	Cap size	Pk	Cat. No.
25	38x122	topo 38-430, braço lateral 15-415	1	734-3006
50	38x141	topo 38-430, braço lateral 15-415	1	734-3007
125	65x155	topo 51-400, braço lateral 33-430	1	734-3008
250	85x175	topo 51-400, braço lateral 33-430	1	734-3009
500	110x190	topo 100-400, braço lateral 45	1	734-3010
1000	130x250	topo 100-400, braço lateral 45	1	734-3011
3000	178x341	topo 100-400, braço lateral 45	1	734-3012
6000	258x404	topo 100-400, braço lateral 45	1	734-3013
8000	293x445	topo 100-400, braço lateral 45	1	734-3014

Cell Culture Flasks, Double Side Arm Celstir®, with Heating Jacket

Wheaton



Borosilicate glass flask, Teflon® and glass impeller assembly, Teflon® and silicone lined top cap

Double side arm Celstir® flasks complete with water jacket allows precise temperature control of flask contents when operated with a recirculating water bath. Hose connectors accept 6 mm tubing.

Capacity (ml)	ØxH (mm)	Cap size	Pk	Cat. No.
25	54x134	top 38-430, side arm 15-415	1	734-3178
50	54x147	top 38-430, side arm 15-415	1	734-3179
125	78x162	top 51-400, side arm 33-430	1	734-3180
250	100x182	top 51-400, side arm 33-430	1	734-3181
500	130x195	top 100-400, side arm 45	1	734-3182
1000	150x260	top 100-400, side arm 45	1	734-3183

Microcarrier Spinner Flasks, Magna-Flex®

Wheaton



Borosilicate glass

These flasks feature a flex type, bulb-shaped impeller, which rotates from a fixed position above liquid level around an indentation in the base of the flask. Primarily used with microcarrier cultures, this stirring system increases stirring efficiency and provides a gentle, even circulation throughout the flask while keeping the beads in suspension.

- Two large side arms with screw cap closures allow easy sampling
- Units 500 ml and larger have 45 mm side arms to be used as an air vent, media inlet or outlet, inoculation port, pH probe, etc
- All flasks have been proportioned to provide a headspace of 1:1 or greater
- Removable stainless steel pin immobilises the impeller during handling or decanting to prevent damage to cells or microcarriers
- Size 125 to 1000 ml are graduated in 50 ml increments; sizes 3000 to 6000 ml are graduated in 500 ml increments

Capacity (ml)	ØxH (mm)	Cap size	Pk	Cat. No.
125	65x155	topo 51-400, braço lateral 33-430	1	734-3000
250	85x175	topo 51-400, braço lateral 33-430	1	734-3001
500	110x190	topo 100-400, braço lateral 45	1	734-3002
1000	130x250	topo 100-400, braço lateral 45	1	734-3003
3000	178x341	topo 100-400, braço lateral 45	1	734-3004
6000	258x404	topo 100-400, braço lateral 45	1	734-3005

Replacement Flasks for Celstir® and Magna-Flex®

Wheaton

Description	Pk	Cat. No.
25 ml Celstir, flask only	1	734-3169
50 ml Celstir, flask only	1	734-3170
125 ml Celstir/Magna-Flex, flask only	1	734-3171
250 ml Celstir/Magna-Flex, flask only	1	734-3172
500 ml Celstir/Magna-Flex, flask only	1	734-3173
1000 ml Celstir/Magna-Flex, flask only	1	734-3174
3000 ml Celstir/Magna-Flex, flask only	1	734-3175
6000 ml Celstir/Magna-Flex, flask only	1	734-3176
8000 ml Celstir/Magna-Flex, flask only	1	734-3177
25 ml jacketed Celstir, flask only	1	734-3184
50 ml jacketed Celstir, flask only	1	734-3185
125 ml jacketed Celstir, flask only	1	734-3186
250 ml jacketed Celstir, flask only	1	734-3187
500 ml jacketed Celstir, flask only	1	734-3188
1000 ml jacketed Celstir, flask only	1	734-3189

Cell Culture

Cell Culture - Larger Scale/Bioprocessing

Tissue Culture Flasks



Siliconised borosilicate glass

For use with the MCS platform biological stirrer, ideal for suspension cell culturing with reduced cell attachment.

- Incorporate a unique base design which, together with the bulb-ended stirrer, ensures that cultures are lifted into suspension at the lowest possible speeds preventing cell damage
- Can be sealed for use with pathogenic materials
- Culture vessels are siliconised to reduce the possibility of cells attaching to and growing on the surfaces

Capacity (ml)	Neck	Pk	Cat. No.
125	Straight	1	442-0706
500	Straight	1	734-0880

Shaft Assembly Kit for Celstir® Flasks

Wheaton

A non-breakable stainless steel shaft to replace the glass shaft which is included with Celstir® flasks. May be retrofitted to existing Celstirs®.

Description	Pk	Cat. No.
For 25 ml flask	1	734-3150
For 50 ml flask	1	734-3151
For 125 ml flask	1	734-3152
For 250 ml flask	1	734-3153
For 500 ml flask	1	734-3154
For 1000 ml flask	1	734-3155
For 3000 ml flask	1	734-3156
For 6000 ml flask	1	734-3157
For 8000 ml flask	1	734-3158

Replacement Impeller for Celstir® Flasks

Wheaton



This unit includes a top cap with liners, glass rod, magnet holder, magnet and stirring paddle (for sizes 125 ml or larger).

Description	Pk	Cat. No.
Impeller for 25 ml flask	1	734-3159
Impeller for 50 ml flask	1	734-3160
Impeller for 125 ml flask	1	734-3161
Impeller for 250 ml flask	1	734-3162
Impeller for 500 ml flask	1	734-3163
Impeller for 1000 ml flask	1	734-3165
Impeller for 3000 ml flask	1	734-3166
Impeller for 6000 ml flask	1	734-3167
Impeller for 8000 ml flask	1	734-3168

Cell Production Roller Apparatus, Modular, with All Position Drive

Wheaton



This Modular Cell Production Roller Culture Apparatus allows flexibility for scale-up and production of monolayer cell cultures in standard roller bottles. The system consists of a base drive unit and five-position roller deck to which additional roller decks can be added. A powerful DC motor, with soft-start speed control, drives the bottles through a series of durable nonslip belts. The all-position drive is a positive traction drive system for lightweight plastic bottles, in which each roller is individually driven.

- Accepts bottles from 108 to 121 mm in diameter and up to 550 mm in length
- Locking speed control knob prevents accidental change in rotation rates
- Supplied without vessels (available separately)

Power: 230 V, 50/60 Hz, 35 W

Bottle speed: 0.25 to 5.3 rpm

WxDxH: Base unit with 1 deck 755x622x340 mm; each additional deck 180 mm high

Weight: Base unit with 1 deck 32 kg; each additional deck an additional 9.5 kg

Warning: Not to be used in temperatures exceeding 40°C.

Description	Pk	Cat. No.
Base with 1 deck, 5 bottle positions, UK plug	1	734-3064
Base with 2 decks, 10 bottle positions, UK plug	1	734-3067
Base with 3 decks, 15 bottle positions, UK plug	1	734-3070
Base with 4 decks, 20 bottle positions, UK plug	1	734-3073
Base with 5 decks, 25 bottle positions, UK plug	1	734-3076
Base with 6 decks, 30 bottle positions, UK plug	1	734-3079
Base with 7 decks, 35 bottle positions, UK plug	1	734-3082
Base with 8 decks, 40 bottle positions, UK plug	1	734-3085
Base with 9 decks, 45 bottle positions, UK plug	1	734-3088

Accessories

Description	Pk	Cat. No.
5-position deck with all-position drive	1	734-3062

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Cell Culture

Cell Culture - Larger Scale/Bioprocessing

Small Bottle Bench Top Roller Culture System

Wheaton



This conventional type roller culture equipment is designed to roll vessels 108 to 121 mm in diameter and up to 290 mm long.

- Compact unit well suited for research work
- Two outside rollers can be moved inward to accommodate bottles as small as 75 mm in diameter
- Each deck can accommodate two vessels (vessels not supplied)

Power: 230 V, 50/60 Hz, 35 W
Bottle speed: 0.1 to 3.8 rpm (based on 110 mm bottle)
WxDxH: 320x325x180 mm
Weight: 8 kg

Warning: Use in an environment rich in carbon dioxide might necessitate more frequent replacement of motor brushes. Not to be used in temperatures exceeding 40 °C.

Description	Pk	Cat. No.
Single deck roller apparatus, UK plug	1	734-1168

Deck kit for small bottle roller culture system

Attaches quickly and easily to the Small Bottle Bench Top Roller Culture System. Holds an additional 2 rollers per kit. These units will accept two additional decks. Kit consists of assembled roller deck, four support posts, drive belt, necessary hardware and assembly instructions.

Weight: 2.3 kg

Description	Pk	Cat. No.
Deck kit for small bottle roller culture system	1	734-1170

Mini Bottle Bench Top Roller Culture System

Wheaton



The Mini Bottle Bench Top Roller Culture System is designed for small scale mixing and agitation using bottles that are too small to be accommodated by standard roller apparatus. It is ideal for 30 ml or larger serum bottles, 100-125 ml media bottles or 38x200 mm culture tubes for the growth and observation of single chicken or rat embryos. The compact size makes it suitable for laboratories with limited space and for use with standard incubators and cold rooms. Each single deck unit will accommodate a minimum of four bottles.

- Continuous rotation of cylindrical bottles at predetermined optimum speeds provides better distribution of media and uniform gassing
- System allows precise speed control of the bottles and is designed to compensate for sudden or prolonged line voltage changes
- Roller shafts are mounted in self-lubricating nylon bearings, which eliminates many maintenance problems
- Able to accommodate bottles 38-60 mm in diameter, up to 240 mm long, with bottle speeds of 3-45 rpm (38 mm) bottle and 2-30 rpm (60 mm) bottle
- Supplied without vessels (available separately)

Power: 230 V, 50/60 Hz, 14 W
WxDxH: 320x325x180 mm
Weight: 8 kg

Warning: Use in an environment rich in carbon dioxide might necessitate more frequent replacement of motor brushes. Not to be used in temperatures exceeding 40 °C.

Description	Pk	Cat. No.
Single deck roller apparatus unit, UK plug	1	734-1165

Deck kit for mini bottle roller culture system

Mini Bottle Deck Kit can be added to Mini Bottle Roller Culture Apparatus to accommodate an additional four bottles per deck. It is possible to add up to a maximum of two kits per unit.

Weight: 4.1 kg

Description	Pk	Cat. No.
Deck kit for mini bottle roller culture system	1	734-1163

BD Falcon™ Roller Bottles

BD Biosciences

**PS, tissue culture treated, with PE caps, sterile, non-pyrogenic**

Roller bottles are used in both research and manufacturing applications involving the scale-up of mammalian cells for purposes of virus propagation and bioproduct production.

- One-piece design compatible with manual or automated filling systems
- Bottle manufacturing process provides greater impact resistance, reducing the risk of accidental loss
- Available with smooth or pleated surface, and standard cap or vented cap with hydrophobic 0.2 µm microporous membrane

Manufactured in a Class 100,000 cleanroom.



Description	Volume (ml)	Growth area (cm ²)	Packed	Pk	Cat. No.
Smooth surface, standard easy on/off cap	2000	850	2/bag	20	734-0455
Smooth surface, vented easy on/off cap			20/bag	20	734-0008
Pleated surface, standard easy on/off cap		1450	1/bag	20	734-1274
			20/bag	20	734-0029

Roller Bottles for Cell Culture

DURAN Group

**DURAN® glass bottle with DIN thread (GL45)**

Supplied with blue PP screw cap and pouring ring.

Ø ext.xH (mm)	Pk	Cat. No.
110x285	1	391-0670
110x450	1	391-0672





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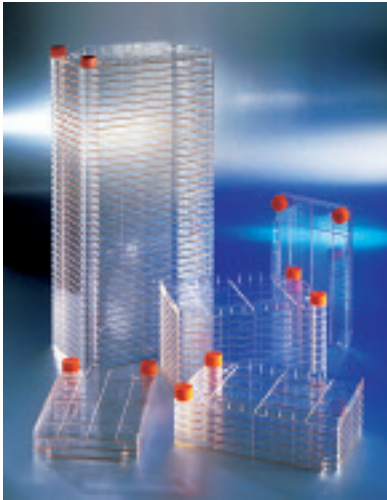


Cell Culture

Cell Culture - Larger Scale/Bioprocessing

Cell Culture Chambers, Corning® CellSTACK®

Corning



The Corning CellSTACK Culture Chambers are available in five sizes and with three different surface treatments.



- Two 26 mm diameter filling ports allow direct access to chamber bottom providing greater flexibility for sterile filling and emptying by pouring, pipetting or via tubing in a fully closed system
- Standard 33 mm threaded caps have 0.2 µm pore non-wettable membranes sealed directly to the caps to allow gas exchange while minimising the risk of contamination
- Optional 33 mm threaded caps are available with integrally sealed USP Class VI certified C-Flex® tubing to allow direct sterile transfer of media and cells via pumping or gravity feed
- Polystyrene construction provides excellent optical clarity and mechanical strength

TC treated surface

Uncharged polystyrene has an uncharged, hydrophobic surface to which cell attachment proteins bind poorly. This results in poor and uneven cell attachment and growth. Tissue culture (TC) treated polystyrene has a negatively charged, hydrophilic surface to which cell attachment proteins bind evenly. This provides a good surface for cell attachment and growth.

Type	Growth area (cm²)	Pk	Cat. No.
1 Chamber	636	8	734-1038
2 Chamber	1272	5	734-1039
5 Chamber	3180	8	734-4061
10 Chamber	6360	2	734-1040
10 Chamber	6360	6	734-1041
40 Chamber	25440	2	734-4052

Corning® CellBIND® surface

The Corning CellBIND surface enhances cell attachment under difficult conditions, such as reduced-serum or serum-free medium, resulting in higher cell yields.

- More consistent and better, even cell attachment leads to increased cell growth and yields
- Adapts cells more quickly to reduced-serum or serum-free conditions
- Reduces premature cell detachment from confluent cultures
- May eliminate the need for tedious, time-consuming, low stability biological coatings
- Requires no refrigeration or special handling and is stable at room temperature

Type	Growth area (cm²)	Pk	Cat. No.
1 Chamber	636	8	734-1017
2 Chamber	1272	5	734-1014
5 Chamber	3180	2	734-4060
10 Chamber	6360	2	734-1207
10 Chamber	6360	6	734-1015
40 Chamber	25440	2	734-1016

Ultra-Low Attachment surface

The Ultra-Low Attachment surface is a covalently bonded hydrogel surface that is hydrophilic and neutrally charged. It minimises cell attachment, protein absorption and enzyme activation. The surface is non-cytotoxic, biologically inert and non-degradable.

- Maintains cells in a suspended, unattached state
- Prevents stem cells from attachment-mediated differentiation
- Prevents anchorage-dependent cells from dividing
- Reduces binding of attachment and serum proteins to the substrate

Type	Growth area (cm²)	Pk	Cat. No.
1 Chamber	636	8	734-4059

Accessories

A variety of optional filling caps are available to allow direct aseptic transfer of media and cells via pumping or gravity feed. Several coupling devices are available on these filling caps with or without integrally sealed USP Class VI certified C-Flex® tubing. Optional filling caps with attached filters with hydrophobic membranes provide for gas exchange and faster aseptic venting during liquid transfers. Extra sterile vented or unvented 33 mm replacement caps are also available.

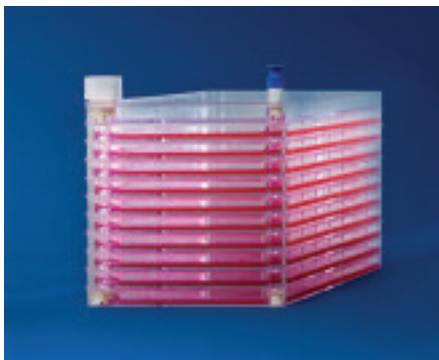
Reusable stacking devices fit between CellSTACK chambers to keep them level and optimise incubator space while providing clearance for gas exchange.

Description	Pk	Cat. No.
Universal cap, with vented overcap, sterile	4	734-4065
Solid cap, sterile	6	734-4167
Vent cap, 9.5 mm ID tubing, 7 cm length, Pall® Acro 50, PVDF filter, sterile	5	734-1108
Vent cap, 9.5 mm ID tubing, 7 cm length, Pall	4	734-1205
Bacterial Air Vent, sterile	6	734-4166
Vent cap, 0.2 mm membrane, sterile	100	734-1208
Two vented overcaps and one solid overcap for the universal cap, sterile	5	734-1109
Fill cap, 3.2 mm ID tubing, female luer lock with male luer plug, sterile	4	734-1209
Fill cap, 6.4 mm ID tubing, 70 cm length, male MPC coupling with female end cap, sterile	5	734-1110
Fill cap, 9.5 mm ID tubing and 7.94 mm barbed fitting, sterile	4	734-4062
Fill cap, female MPC coupling, 6.4 mm ID barbed fitting with male end cap, sterile	4	734-4063
Fill cap, female MPC coupling, 9.5 mm ID barbed fitting with male end cap, sterile	4	734-4066
Fill cap, male MPC coupling, 6.4 mm ID barbed fitting with female end cap, sterile	4	734-4068
Fill cap, male MPC coupling, 9.5 mm ID barbed fitting with female end cap, sterile	5	734-4064
Stacking device, ABS, non-sterile		

All caps are 33 mm threaded caps

Cell Factories, EasyFill™, Nunclon™Δ

Nunc™



PS, sterile

The EasyFill Cell Factory has one large and one small opening in each unit, which makes it versatile and easy to use. EasyFill Cell Factory bridges the gap between small scale research and large scale GMP production. It can be used as it is, without any accessories, or used with plug and play connections for rapid attachment of tubing and filters, significantly reducing contamination risk. EasyFill systems are available with one, two, four or ten growth chamber levels, providing surface areas ranging from 630 cm² to 6300 cm².

- Versatile – large opening facilitates the desire to pour media directly and small opening supports those that need a closed, aseptic system for filling and harvesting
- Bridges small scale process development with large scale production
- Easy to use and ready to use straight from the box, no accessories needed
- High yield and process efficiency
- Nunclon™Δ surface treatment to promote consistent performance for cell attachment and proliferation in serum free and serum containing media

WxL: 250x335 mm

Delivery Information: Shipped sterile and ready to use, for single use applications.



Cell Culture

Cell Culture - Larger Scale/Bioprocessing

Type	Growth area (cm²)	Recommended working			Cat. No.
		volume (ml)	Pk		
1 Level	6302	200	6		734-2242
2 Levels	1260	400	6		734-1443
4 Levels	2520	800	4		734-1445
10 Levels	6300	2000	2		734-1444

Accessories

Description	Pk	Cat. No.
PC connector	10	390-0343
Gelman filter with connector, sterile	2	390-0344
0.2 µm air filter with connector, sterile	2	390-0345

Cell Factories, Nunclon™Δ

Nunc™



PS, sterile

For the industrial scale production of, for example, vaccines, monoclonal antibodies or pharmaceuticals.

- Ideal for adherent cells, but can also be used for suspension cultures
- Growth kinetics are unaltered from laboratory scale culture
- Available in 1,2,10 and 40 tray versions for easy scale-up
- Low contamination risk
- Certified Nunclon™Δ surface treatment ensures excellent conditions for cell attachment and growth

Tray LxW: 335x205 mm



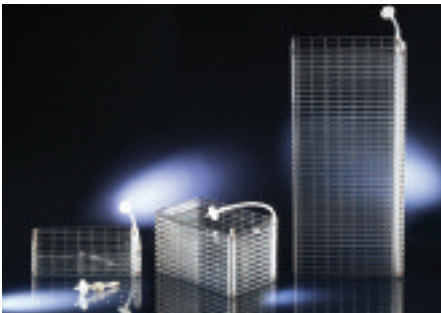
Type	Recommended working			Pk	Cat. No.
	volume (ml)	Growth area (cm²)			
1 level	200	632	8		732-2603
2 Levels	400	1264	5		732-2606
10 Levels	2000	6320	2		734-2082
10 Levels	2000	6320	6		734-2105
40 Levels	8000	25280	2		734-2028

Accessories

Description	Pk	Cat. No.
Cover caps	400	734-2143
Start-up kit, sterile	1 Kit	734-2106
Connector Teflon®	10	734-2110
Filter	10	391-8339

Cell Factories for Active Gassing, Nunclon™Δ

Nunc™



PS, sterile

For industrial scale production of, for example, vaccines, monoclonal antibodies, or pharmaceuticals. The patented gas-flow system secures a controlled atmosphere in the culture trays by equal distribution of user-specified gas mix actively pumped through the pre-mounted filter. Particularly oxygen demanding and pH sensitive cells may benefit from the controlled atmosphere.

- Gas is equally distributed between trays, as well as in each individual tray
- Surface treatment ensures excellent conditions for cell attachment and growth
- Available in 4, 10 and 40 tray versions for easy scale up
- Low contamination risk
- Compatible with existing manual and automated handling equipment from Nunc™

Tray LxW: 335x205 mm



Recommended working				
Type	volume (ml)	Growth area (cm²)	Pk	Cat. No.
4 Levels	800	2528	10	734-1366
10 Levels	2000	6320	6	734-1339
40 Levels	8000	25280	2	734-1367

Accessories

Description	Pk	Cat. No.
Start-up kit, sterile	1 Kit	734-2106
Connector Teflon®	10	734-2110
Cover caps	400	734-2143
Filter	10	391-8339

BD Falcon™ Cell Strainers

BD Biosciences



An easy, ready-to-use way to consistently obtain a more uniform single-cell suspension. Made of a strong nylon mesh and available with 40, 70 or 100 µm pores that are evenly spaced for optimal performance in a variety of applications. A faster and easier alternative to gauze filtration in procedures involving dissociation of cells from either clumps or primary tissue.



- Moulded, colour-coded PP frame with tab enables easy handling
- Fits perfectly into a 50 ml BD Falcon™ conical tube or other similarly sized tube
- Sterilised by gamma irradiation and conveniently available in individual, peel-open packaging
- Extended lip on strainer enables aseptic handling with forceps

Description	Pk	Cat. No.
Cell strainers, 40 µm pore size, blue frame	50	734-0002
Cell strainers, 70 µm pore size, white frame	50	734-0003
Cell strainers, 100 µm pore size, yellow frame	50	734-0004

BD Falcon™ Cell Scrapers

BD Biosciences



PS handle, TPE blade

Designed to provide maximum accessibility to the growth surfaces of a variety of culture vessels.



- Cross-ribbed PS handle provides greater rigidity, to ensure better control while scraping cells
- Highly compliant TPE blade pivots to provide multiple angles to remove cells from the entire growth surface

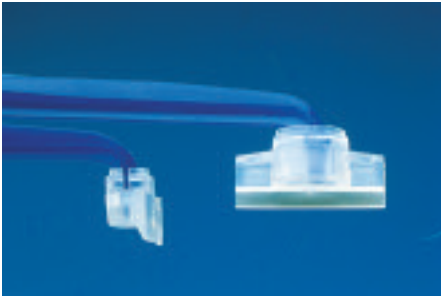
Description	Total length (mm)	Pk	Cat. No.
Cell scraper for use with 12.5-25 cm² vessels, 18 mm blade	180	100	734-0385
Cell scraper for use with 75 cm² vessels, 18 mm blade	250	100	734-0386
Cell scraper for use with 75 cm² vessels, 30 mm blade	250	100	734-1111
Cell scraper for use with 150-175 cm² vessels, 30 mm blade	400	100	734-0387

Cell Culture

Cell Culture - Accessories and Sealing Systems

Cell Scrapers

Nunc™



Cell scrapers for cell harvesting are available in two lengths, with adjustable blade for optimal application flexibility. Non-pyrogenic.



Description	Total length (mm)	Pk	Cat. No.
For use with 25-80 cm² flasks, blade offset 7.5 mm, blade width 15.5 mm	230	250	734-2132
For use with 75-175 cm² flasks, blade offset 16 mm, blade width 17.5 mm	320	250	734-2133

Cell Scrapers and Cell Lifters

Corning



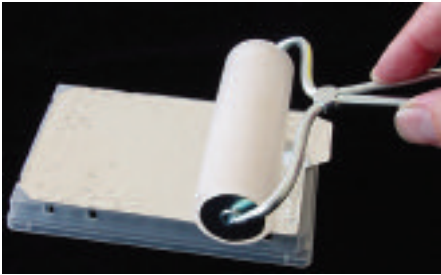
Useful for the manual harvesting of cells, scrapers are designed for use in flasks and cell lifters for use in harvesting cells (especially stem cells) in dishes.



- Blade design minimises cell damage and ensures even contact with the growth surface
- Individually wrapped
- Sterilised by gamma radiation
- Certified non pyrogenic

Description	Pk	Cat. No.
Cell lifter, 19 mm blade, 180 mm handle	100	734-1526
Small cell scraper, 18 mm blade, 250 mm handle	100	734-1527
Large cell scraper, 30 mm blade, 390 mm handle	100	734-1528

Plate Roller for Securing Films and Foils to Microplates

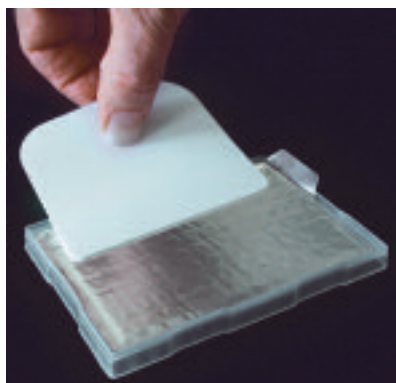


Soft rubber roller recommended for assuring tight and consistent application of adhesive films to microplates.



Description	Pk	Cat. No.
Plate roller	1	391-1278

Plate Paddles for Securing Films and Foils to Microplates



An alternative to the plate roller for pressing films to assure a secure uniform seal around all wells. The paddles are especially recommended for sealing films on raised-rim plates because they fit within the rim of the plate.



Description

Film sealing paddles

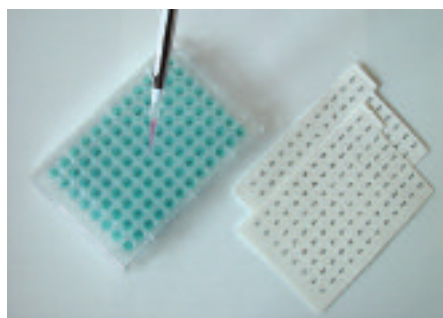
Pk

50

Cat. No.

391-1283

Well Identification Labels for 96-Well Flat Bottom Plates



Handy labels for application on the underside of flat-bottom 96-well plates. Each well is identified by a black-on-clear alphanumeric index that can be easily captured in microscopic images. Label positions easily by alignment with inside of plate edges.



- Identify wells clearly when pipetting
- Identify wells under microscopic examination
- Position easily on underside of standard 96-well plates

Description

Plate bottom labels, non-sterile

Pk

100

Cat. No.

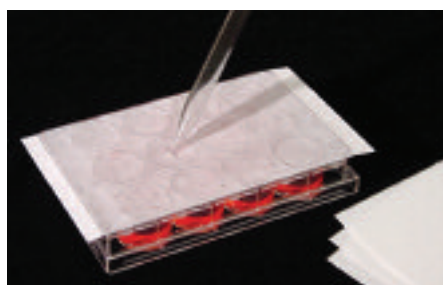
391-1284

Plate bottom labels, sterile

50

391-1285

Breatheable Rayon Films for Biological Cultures



A 114 μm thick hydrophobic porous film with medical-grade adhesive for tissue culture plates, bio-blocks, and 96-well plates where gas exchange is necessary for cell or bacterial growth. These rayon films minimise cross-contamination, spillage and evaporation. They allow uniform air and CO_2 exchange for all wells, unlike plate lids which favour exchange for wells near plate edges. Sterile product is packaged in tamper-evident bags of 25.



- Non-cytotoxic, highly gas permeable
- Pierceable with tips or pipettes for sample recovery
- Recommended for temperatures from $-20\text{ }^{\circ}\text{C}$ to $+80\text{ }^{\circ}\text{C}$

Each film LxD: 142.9x82.6 mm for standard-size tissue culture plates

Description

Rayon films, non-sterile

Pk

100

Cat. No.

391-1261

Rayon films, sterile

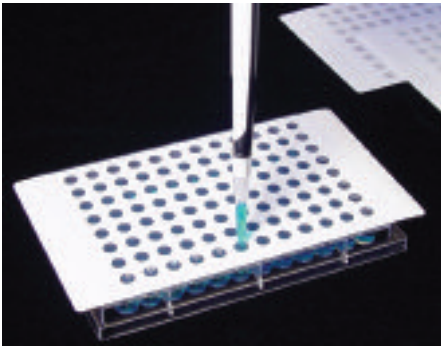
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391-1262

Cell Culture

Cell Culture - Accessories and Sealing Systems

Pierceable Films for Robotics, Clear-Zone



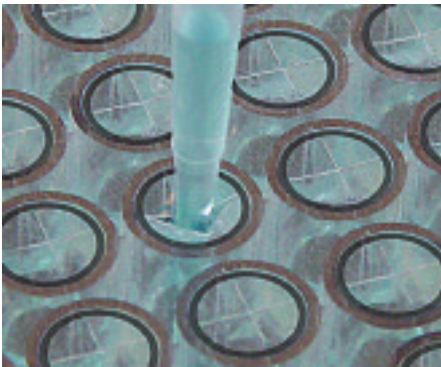
Addition of a die-cut white polypropylene sub-layer provides these polyethylene films with an adhesive-free zone above each well for applications where adhesive fouling of pipette tips or robotic probes is a concern. Suitable for 96-well plates only.



- Clear zone above each well is free of adhesive
- Minimise sample exposure to adhesive

Description	Pk	Cat. No.
Clear-Zone films, non-sterile	50	391-1264
Clear-Zone films, sterile	50	391-1265

Precut Pierceable Vinyl Films for Robotics



These 100 µm thick vinyl films with 20 µm adhesive layer are designed for temporary protection of samples in 96-well plates from contamination and evaporation. A precut pattern over each well separates the film into four flaps that bend inward easily when pushed by a robotic probe or pipette tip, allowing access to the sample without coring or adhesive fouling. The resilient flaps regain their original position after sampling for continued sample protection. For long-term sample protection after sampling, a continuous film should be applied as a second layer. Suitable for sealing all standard 96-well plates.



- Protect samples and limit evaporation short-term
- Precut flaps bend inward without fouling probes or tips
- Flaps close for continued protection after sampling

Each film LxD: 145.5x79.4 mm

Description	Pk	Cat. No.
Precut vinyl films, non-sterile	100	391-1286
Precut vinyl films, sterile	50	391-1287

Breathable Sealing Film
Axygen



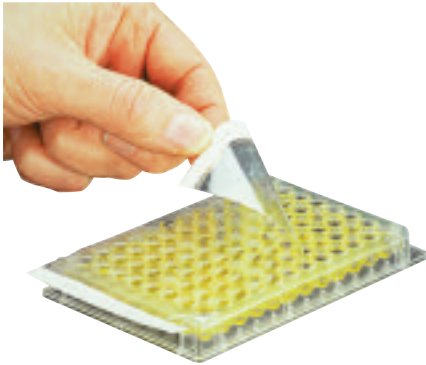
Porous film seals PP and PS culture plates, 96- and 384- well plates, and other assay plates.

- Allows effective gas exchange for cellular and bacterial cultivation and prevents contamination
- Sterile packs available

Description	Pk	Cat. No.
Breathable film non sterile	100	732-1027
Breathable film sterile	50	732-1028

Sealing Film, AxySeal

Axygen



Polyester based with uniformly and consistently applied acrylic adhesive to eliminate the edge effect in ELISA assays. Suitable for sealing tissue culture plates, for short-term storage and incubation, for transport and the containment of biohazardous solutions.

- No edge effect in ELISA assays
- Functional temperature range of -40 to +104 °C

Description	Pk	Cat. No.
Sealing film	100	732-7506

Sealing Mats, BugStopper™

Whatman



Bugstopper™ sealing mats provide a simple and reliable method for venting cultures being grown in a 24-well microplate. This reusable, autoclavable, sterile closure, which is produced using chemically resistant bio-safe silicone rubber, incorporates hydrophobic microfilters which provide an ideal vent for each well and eliminates well-to-well cross contamination. More efficient than plastic lids, testing has confirmed that Bugstopper™ sealing mats improve cell growth and significantly reduce evaporation, making them ideal for extended growth of slow growing bacteria and fungi.



- Repeated autoclave cycles do not affect gas exchange or retention capabilities
- Rated 99.9% efficient for bacteria and viruses, by restricting microorganisms while allowing O₂ and CO₂ to pass through the membrane
- Silicone rubber reseals after puncture thus keeping cultures sterile during inoculation or aspiration

Description	Pk	Cat. No.
Sealing mats BugStopper™	5	512-1044

BD™ Endothelial Cell Growth Supplement

BD Biosciences

Endothelial Cell Growth Supplement (ECGS) is a broadly used supplement to culture a variety of cells, particularly endothelial cells. ECGS contains various growth factors (for example, acidic FGF or ECGF-a).

Formulation	Lyophilised from NaCl-containing buffer with streptomycin sulphate; reconstitute in serum-free medium.
Source	Bovine brain
Quality control	Tested for ability to promote proliferation of Foetal Bovine Heart Endothelial Cells (FBHEC) in medium containing 10% newborn calf serum Filtered (0.2 µm membrane) and tested and found negative for bacteria, fungi and mycoplasma
Recommended concentration	5-150 µg/ml medium depending on cell type. Some primary cells require supplementation of 1-100 µg/ml heparin.
Storage and stability	Stable for at least three months at 2 to 8 °C (lyophilised) or = one month at -20 °C (solubilised). Avoid multiple freeze-thaw cycles.

Description	Pk	Cat. No.
BD™ endothelial cell growth supplement	15 mg	734-1306

Cell Culture

Cell Culture - Media and Supplements

BD™ MITO+ Serum Extender

BD Biosciences

BD™ MITO+ Serum Extender is a concentrated, fully defined formulation of hormones, growth factors (EGF and FGF), and other metabolites (insulin and steroid hormones). It can be used to culture a variety of cells under serum-free or serum-reduced conditions.

Formulation	Lyophilised from a solution of Dulbecco's Phosphate Buffered Saline (DPBS) containing ECGS, EGF, insulin, human transferrin, triiodothyronine, progesterone, oestradiol-17β, testosterone, hydrocortisone, selenous acid, and o-phosphorylethanolamine; reconstitute in 5 ml distilled H2O (stock solution).
Quality control	Tested for ability to promote proliferation of BALB/c-3T3 cells in serum-reduced medium Filtered (0.2 µm membrane) and tested and found negative for bacteria, fungi and mycoplasma
Recommended concentration	1:1000 (dilute stock solution in serum-reduced medium)
Storage and stability	Stable for at least three months at 2-8 °C (lyophilised) or 3 months at -20 °C (solubilised). Avoid multiple freeze-thaw cycles.

Description	Pk	Cat. No.
BD MITO+	5 ml	734-1317

Serum Replacement, Nu-serum™

BD Biosciences

BD Nu-serum™ growth media supplement provides a low-protein alternative to newborn calf, foetal bovine, and other sera routinely used for cell culture. The low-protein content facilitates protein purification, virus production, monoclonal antibody production and screening, and increases the frequency of successful transfection of cells.

Formulation	Frozen solution containing 2.5% foetal bovine serum, EGF, ECGS, insulin, human transferring, triiodothyronine, progesterone, oestradiol-17β, testosterone, hydrocortisone, selenous acid, o-phosphorylethanolamine, glucose, amino acids, vitamins, and other trace elements and nutrients contained in the Ham's F12 medium base
Quality control	Tested at a concentration of 10% for the ability to stimulate a =100-fold increase in growth of BHK-21 and a = 13-fold increase in growth of BALB/c-3T3 cells Tested for total protein content, pH, and osmolarity Filtered (0.2 µm membrane) and tested and found negative for bacteria, fungi, mycoplasma, and viruses (bovine diarrhea virus, bovine parvovirus, bovine adenovirus, and rabies virus); also tested for the absence of cytopathic effects (CPE), inclusion bodies and haemadsorption Tested for endotoxin (LAL assay)
Recommended concentration	Replaces foetal bovine and other sera on an equivalent volume basis
Storage and stability	Stable for at least three months at -20 °C

Description	Pk	Cat. No.
BD Nu-Serum	500 ml	734-1318

BD™ Collagen II

BD Biosciences

Collagen II is the principal collagenous component of cartilage, intervertebral disc, and vitreous humour. Collagen II supports chondrocyte adhesion and may influence the differentiated phenotype of these cells. In culture, Collagen II is used for attachment and differentiation of chondrocytes. It can also be used as an in vivo model in rats and mice for arthritis studies (injection of Bovine Collagen II induces arthritis).

Formulation	Frozen in 15 mM acetic acid
Source	Bovine articular cartilage
Quality control	Quality controlled by SDS-PAGE and tested and found negative for bacteria, fungi, and mycoplasma
Storage and stability	Stable for at least three months at -70 °C

Description	Pk	Cat. No.
BD™ Collagen II, bovine	5 mg	734-1272

BD™ Collagen V
BD Biosciences

Collagen V is found in whole placenta, amnion, chorion, and cornea. It can be used as a thin coating on tissue culture surfaces to study Collagen V effects on cell behavior. Collagen V has been shown to inhibit endothelial cell proliferation selectively.

Formulation	Frozen in 10 mM acetic acid
Source	Human placenta
Quality control	Quality controlled by SDS-PAGE and tested and found negative for bacteria, fungi, and mycoplasma Source material tested for hepatitis B antigen and HIV-1 antibody
Storage and stability	Stable for at least three months at -70 °C

Description	Pk	Cat. No.
BD™ Collagen V, human	250 µG	734-0106

BD™ Fibronectin
BD Biosciences

Fibronectin (FN) is found in interstitial matrix and plasma. The principal function of Fibronectin appears to be in cellular migration during wound healing and development. It can be used as a thin coating on tissue culture surfaces to promote attachment, spreading and proliferation of a variety of cell types.

Formulation	Lyophilised from CAPS buffer containing NaCl and CaCl2, pH 11.0; reconstitute in distilled water (do not agitate or swirl)
Source	Human plasma
Quality control	Quality controlled by SDS-PAGE and tested and found negative for bacteria, fungi and mycoplasma. Source material tested for hepatitis B antigen and HIV-1 antibody
Molecular weight	440 kD (unreduced form)
Storage and stability	Stable for three months at 2-8 °C (lyophilised) or two weeks at -20 °C (solubilised). Do not store in frost-free freezer. Avoid multiple freeze-thaws.

Description	Pk	Cat. No.
Fibronectin, human	1 mg	734-0085
	5 mg	734-0101
	25 mg	734-0103

BD™ Poly-D-Lysine
BD Biosciences

Poly-D-Lysine (PDL) is a synthetic molecule used as a coating to enhance cell attachment to plastic and glass surfaces. It has been used to culture a wide variety of cell types, particularly neurons, glial cells, and transfected cells.

Formulation	Lyophilised from aqueous solution; reconstitute in distilled water
Source	Synthetic
Quality control	Quality controlled by SDS-PAGE and tested and found negative for bacteria, fungi, and mycoplasma
Molecular weight	500-550 kD
Storage and stability	Stable for at least three months at 2-8 °C (lyophilised) or one week at 2-8 °C (solubilised)

Description	Pk	Cat. No.
Poly-D-Lysine	20 mg	734-1102

Cell Culture

Cell Culture - Media and Supplements

BD™ Vitronectin

BD Biosciences

Vitronectin is also known as S-protein, serum spreading factor epibolin. Vitronectin and fibronectin are the two major adhesive proteins in plasma and serum. When used as coating on tissue culture surfaces, vitronectin is useful to promote cell attachment, spreading, proliferation, and differentiation normal and neoplastic cells, and to study cell migration.

Formulation	Lyophilised (dialysed against 10 mM phosphate buffer, pH 7.7); reconstitute in distilled water or buffered solution at neutral pH
Source	Human plasma
Quality control	Quality controlled by SDS-PAGE and tested and found negative for bacteria, fungi, and mycoplasma. Source material tested for hepatitis B antigen and HIV-1 antibody
Molecular weight	75 kD and 65 kD components
Storage and stability	Stable for at least three months at 2-8 °C (lyophilized) or one week at 2-8 °C (solubilised)

Description	Pk	Cat. No.
BD™ Vitronectin	250 µg	734-0098

BD Cell-Tak™ Cell and Tissue Adhesive

BD Biosciences

BD Cell-Tak™ Cell and Tissue Adhesive is a formulation of polyphenolic proteins extracted from Mytilus edulis (marine mussel). These proteins are the key components of the glue secreted by the mussel to anchor itself to solid substrates in the marine environment. BD Cell-Tak™ is used to attach cells or tissue sections to many types of surfaces, including plastic, glass, metal, Teflon®, and biological materials. It can simplify the manipulation of biological samples for a number of in vitro techniques, including in situ hybridization, immunoassays, microinjection, immunohistochemistry, and establishing primary cells in culture. BD Cell-Tak™ is biocompatible and demonstrates no species specificity.

Formulation	As a liquid in 5% acetic acid
Source	Polyphenolic proteins secreted by Mytilus edulis
Quality control	Dopa: protein ratio >0.05 Tested for ability to promote cell attachment and spreading of BHK-21 and U937 cells Tested and found negative for bacteria, fungi, and mycoplasma
Molecular weight	110-140 kD
Storage and stability	Stable for at least three months at 2-8 °C. Do not freeze.

Description	Pk	Cat. No.
BD Cell-Tak cell and tissue adhesive	1 mg	734-1081
	5 mg	734-1083
	10 mg	734-0102

BD™ Matrigel Matrix High Concentration

BD Biosciences

BD Matrigel™ Matrix High Concentration (HC) is suited for *in vivo* applications where a high protein concentration augments growth of tumours. The high protein concentration also allows the BD Matrigel Matrix plug to maintain its integrity after subcutaneous injection into mice. This keeps the injected tumour cells and/or angiogenic compounds localized for *in situ* analysis and/or future excision. Applications include *in vivo* angiogenesis studies and augmentation of tumour growth in nude mice.

- Typical protein concentration 18-22 mg/ml
- Lot specific specification sheet supplied with each delivery
- Tested for the ability to promote neurite outgrowth of chick dorsal root ganglia cells and for the ability to gel quickly and maintain its form with culture medium for a period of 14 days at 37 °C
- Bacteria-, fungi- and mycoplasma-free
- Endotoxin tested by LAL assay

Description	Pk	Cat. No.
BD Matrigel™ Matrix, high concentration, phenol red free	10 ml	734-1402
BD Matrigel™ Matrix, high concentration	10 ml	734-0273

BD Matrigel™ Basement Membrane Matrix

BD Biosciences

BD Matrigel™ Basement Membrane Matrix is a solubilised basement membrane preparation extracted from the Engelbreth-Holm-Swarm (EHS) mouse sarcoma, a tumour rich in extracellular matrix proteins. Its major components are laminin, followed by collagen IV, entactin, and heparan sulphate proteoglycan. It also contains growth factors that occur naturally in the EHS tumour. At room temperature, BD Matrigel™ Matrix polymerizes to produce biologically active matrix material resembling the mammalian cellular basement matrix. BD Matrigel Basement Membrane Matrix is effective for the attachment and differentiation of both normal and transformed anchorage dependent epithelial and other cell types. The Growth Factor Reduced (GFR) product is useful where a more highly defined basement preparation is desired.

Source	Engelbreth-Holm-Swarm mouse tumour
Quality control	Tested for ability to gel quickly and maintain this form with culture medium for a period of 14 days at 37 °C Tested for the ability to promote neurite outgrowth of chick dorsal root ganglia cells Tested and found negative for bacteria, fungi, and mycoplasma Tested for endotoxin (LAL assay)
Storage and stability	Stable for at least three months at -20 °C or 12 days at 37 °C

Description	Pk	Cat. No.
BD Matrigel™ Basement Membrane Matrix	10 ml	734-1100
Growth factor reduced BD Matrigel™ Matrix	10 ml	734-0269

BD™ Human Extracellular Matrix

BD Biosciences

Human Extracellular Matrix (ECM) is a chromatographically partially purified matrix extract derived from human placenta. It is comprised of laminin, collagen IV, and heparan sulphate proteoglycan. Human ECM promotes attachment, spreading, mitosis, and differentiation of anchorage-dependent epithelial cells, particularly of human origin.

Formulation	Frozen in 20 mM sodium phosphate buffer, pH 7.4
Source	Human placenta
Quality control	Partially purified Tested for ability to initiate differentiation of NG-108 human neuroblastoma cells Filtered and tested and found negative for bacteria, fungi, and mycoplasma Source material tested for hepatitis B antigen and HIV-1 antibody
Storage and stability	Stable for at least three months at -70 °C

Description	Pk	Cat. No.
Extracellular Matrix, human	1 mg	734-0097

BD™ 3-Dimensional Scaffolds

BD Biosciences

A variety of 3D biodegradable scaffolds are used as artificial substitutes for the extracellular matrix. These materials may consist of natural molecules and/or synthetic polymers. In contrast to conventional 2D cell culture systems, 3D scaffolds provide an adhesive substrate that also serves as a 3D physical support matrix for *in vitro* cell culture as well as *in vivo* tissue regeneration.

Type	BD™ 3D Calcium Phosphate Scaffold	BD™ 3D Collagen Composite Scaffold	BD™ 3D OPLA® Scaffold
Scaffold Øxh (mm)	5x3 (fit into well of a 96-well plate)	5x3 (fit into well of a 96-well plate)	5x3 (fit into well of a 96-well plate)
Volume (cm³)	0.058	0.039	0.039
Hydration capacity (µl)	30	25	30
Average pore size (µm)	200-400	100-200	100-200
Property	Sponge-like structure/non-compressible	Sponge-like structure/compressible	Sponge-like structure/non-compressible
Storage and stability	Stable for at least 12 months when stored at 4-30°C	Stable for at least 12 months when stored at 4-30°C	Stable for at least 12 months when stored at 4-30°C

Cell Culture

Cell Culture - Media and Supplements

BD™ 3D Calcium Phosphate Scaffold

This is a proprietary mineralised calcium phosphate bioceramic that is ideal for *in vitro* and *in vivo* analysis of bone metabolism and cartilage regeneration. Applications include promotion of cell growth and differentiation (e.g., MC3T3-E1 osteoblasts), stationary cell cultivation in Multiwell plates, dynamic cell seeding in larger vessels (e.g., BD Falcon™ 50 ml conical tubes), bone remodeling studies *in vitro* and *in vivo*, and non-invasive evaluation of cell growth using the BD Oxygen Biosensor System.

Description	Pk	Cat. No.
BD™ 3D Calcium Phosphate Scaffold	24	734-1063

BD™ 3D Collagen Composite Scaffold

This is a natural scaffold manufactured from a proprietary mixture of collagens that are derived from bovine hide. Overall, this material exhibits collagen fibrillar architecture, which is representative of the structure of collagen within the interstitial matrix. Applications include promotion of cell growth and differentiation (e.g., MC3T3-E1 osteoblasts, WI-38 human lung fibroblasts, primary rat hepatocytes), ECM pre-incubation for specific stem/progenitor cell differentiation assays, dynamic cell seeding in larger vessels (e.g., BD Falcon™ 50 ml conical tubes), and non-invasive evaluation of cell growth using the BD Oxygen Biosensor System.

Description	Pk	Cat. No.
BD™ 3D Collagen Composite Scaffold	24	734-1061

BD™ 3D OPLA® (Open-Cell Polylactic Acid) Scaffold

This is a synthetic polymer scaffold that is synthesized from D,D-L,L polylactic acid. This material has a faceted architecture, which is effective for culturing high-density cell suspensions. Applications include short- and long-term growth and differentiation of a variety of cell types, including epithelial cells (e.g., hepatocytes), neurons, endothelial cells, osteoblasts, chondrocytes, fibroblasts, and smooth muscle cells, ECM pre-incubation for specific stem/progenitor cell differentiation assays, dynamic cell seeding in larger vessels (e.g. BD Falcon™ 50 ml conical tubes), and non-invasive evaluation of cell growth using the BD Oxygen Biosensor System.

- Support short- and long-term growth and differentiation of a variety of cells
- Suitable for *in vitro* and *in vivo* basic research

Description	Pk	Cat. No.
BD™ 3D OPLA® Scaffold	1	734-1062

BD™ Dispase

BD Biosciences

Dispase is a bacillus-derived neutral metalloprotease that is recommended for recovering cell cultured on BD Matrigel™ Basement Membrane Matrix. Dispase will yield a single cell suspension far more gently and effectively than trypsin, collagenase, or other proteolytic enzymes; it will not harm cells harvested for sub cultivation or bioassays. In addition, Dispase may be used for tissue dissociation. Dispase cleaves fibronectin, collagen IV, and to a lesser extent collagen I, but is does not cleave collagen V or laminin.

Description	Pk	Cat. No.
BD™ Dispase, 5000 caseinolytic units	100 ml	734-1312

BD™ Cell Recovery Solution

BD Biosciences

BD™ Cell Recovery Solution allows for the recovery of cells cultured on BD Matrigel™ Basement Membrane Matrix for subsequent biochemical analysis. BD Cell Recovery Solution depolymerises BD Matrigel Matrix gels without enzymatic digests and lengthy incubation periods at high temperatures. Cells are released without damage thereby avoiding biochemical changes during incubation and digestion of extracellular portions of cell-surface receptors and adhesion molecules.

Formulation	Non-enzymatic proprietary solution
Quality control	Tested for ability to depolymerise a 1 mm thick layer of gelled BD Matrigel™ Matrix after one hour at 2-8 °C Filtered and tested and found negative for bacteria, fungi, and mycoplasma
Storage and stability	Stable for at least three months at 2-8 °C

Description	Pk	Cat. No.
BD cell recovery solution	100 ml	734-0107

Ampicillin, Sodium Salt

AppliChem

Ampicillin is a half-synthetic penicillin (β -lactam antibiotic), known to interfere with the wall peptide crosslinking in growing bacteria. It inhibits the enzyme activity of transpeptidase, carboxypeptidase and endopeptidase. Its action is bactericidal and the pH optimum for its action ranges from pH 5.5-6.

Ampicillin sodium salt is readily water soluble and stock solutions are prepared at concentrations of 50 mg/ml, stored at -20 °C in aliquots. The working concentration in LB-ampicillin plates, LB or TB medium is 50 μ g/ml (dilution 1:1000).

Stability: The activity of a 10% aqueous solution of ampicillin, if stored at +4 °C (pH 7), is reduced by 15% after 24 hours, 33% after 48 hours and 65% after 7 days. At room temperature, the corresponding loss of activity is 28%, 45% and 81%, respectively.

Pk	Cat. No.
10 g	A0839.0010
25 g	A0839.0025
100 g	A0839.0100

G418 Disulphate

AppliChem

G418 blocks protein synthesis in mammalian cells by interfering with ribosomal function. It is an aminoglycoside antibiotic, similar in structure to neomycin, gentamycin, and kanamycin. G418 disulphate is used for the selection of stably transformed cells, which have incorporated the neomycin resistance gene (aminoglycoside phosphotransferase) derived from the transposons Tn 5 and Tn 601, respectively.

Stability and Solubility: G418 is stable at +4 °C. Solutions are stored at -20 °C and are stable for up to 2 years. Stock solutions of G418 should be prepared in a highly buffered solution, so that addition of the drug does not alter the pH of the medium. Stock solutions can be prepared at a concentration of 50 mg/ml.

Pk	Cat. No.
1 g	A2167.0001
250 mg	A2167.0250
500 mg	A2167.0500

Gentamycin Sulphate

AppliChem

Gentamycin is an aminoglycoside antibiotic and was isolated from *Micromonospora* species (actinomycetales). The sulphate salt is soluble in water, formamide, ethylene glycol, 0.1 N NaOH or 0.1 N HCl at a concentration of >20 mg/ml. It is insoluble in methanol, ethanol, acetone, benzene or chloroform. In solution Gentamycin is very stable at -20 to +37 °C. Short autoclaving is possible. It may be employed in the pH range from 2.2 and 10 without loss of activity.

Pk	Cat. No.
1 g	A1492.0001
5 g	A1492.0005
10 g	A1492.0010
25 g	A1492.0025

Penicillin G Potassium Salt

AppliChem

Penicillin G was isolated from *Penicillium notatum*. The bactericidal effect of this β -lactam antibiotic is based on the irreversible inhibition of transpeptidase, interfering with the biosynthesis of the cell wall in bacteria.

Stability: Penicillin G potassium salt is readily water soluble. The dry substance can be stored at room temperature or +4 °C and is stable for up to 5 years. The buffered solution (pH 4.5-7) loses 5% of its activity after 20 days at +4 °C. Storage of the solution at room temperature results in a 5% loss of activity after 48 hours, 10% loss after 7 days, and 20-50% loss after 14 days. The stability in unbuffered solution is much lower (approximately 3-7 days at +4 °C).

Pk	Cat. No.
10 g	A1837.0010
25 g	A1837.0025
100 g	A1837.0100

Cell Culture

Cell Culture - Media and Supplements

PCR Mycoplasma Test Kit

AppliChem

Ready-to-use PCR Mix for the detection of mycoplasma in cell culture

The PCR Mycoplasma Test Kit is designed to detect the presence of mycoplasma-contaminating biological materials, such as cultured cells. Mycoplasma detection by the direct culture procedure is time-consuming and some mycoplasma species are difficult to cultivate. With PCR testing, results are obtained within a few hours, since the presence of contaminant mycoplasma can be easily detected simply by verifying the bands of amplified DNA fragments in electrophoresis. There is no need to prepare probes labelled with radioisotopes, or to calculate enzyme, dNTP's or buffer concentrations. Instead, a ready-to-use, optimised PCR mix is supplied. The primer set allows detection of various mycoplasma species (*M. fermentans*, *M. hyorhinis*, *M. arginini*, *M. orale*, *M. salivarium*, *M. hominis*, *M. pulmonis*, *M. arthritidis*, *M. bovis*, *M. pneumoniae*, *M. pirum*, *M. capricolum*) as well as *Acholeplasma* and *Spiroplasma* species, with high sensitivity and specificity.

Description	Pk	Cat. No.
PCR Mycoplasma Test Kit, 10 tests	1 Kit	A3744.0010
PCR Mycoplasma Test Kit, 20 tests	1 Kit	A3744.0020

Myco-3

AppliChem

For the treatment of Mycoplasma-infected cells.

Myco-3 is a 100x concentrated solution based on the ciprofloxacin antibiotic, which is a member of the fluoroquinolone group. Many mycoplasma species have been found to be sensitive to Myco-3, including *A. laidlawii*, *M. orale*, *M. hyorhinis*, *M. fermentans*, and *M. arginini*. These species are responsible for most of the contamination in cell culture. At the concentrations recommended for use (1 µg/ml), no cytotoxic effects have been found, and the treatment is easy to perform. The pH value of Myco-3 is acidic (pH 4-5). When added to medium the pH change is negligible.

Pk	Cat. No.
10 ml	A5240.0010
20 ml	A5240.0020
100 ml	A5240.0100



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